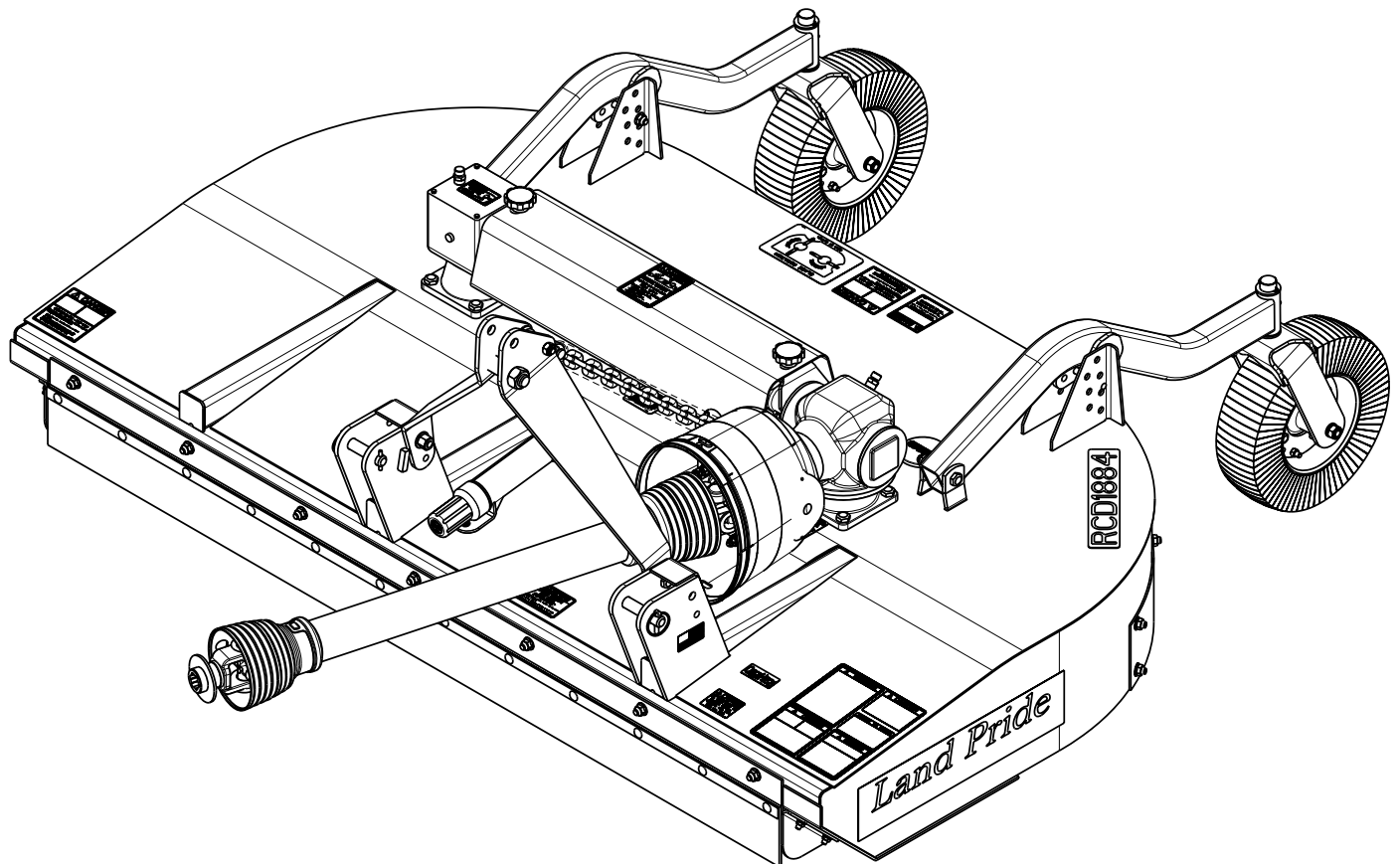


Rotary Cutters

RCD1884



30965

326-355M Operator's Manual



Read the Operator's Manual entirely. When you see this symbol, the subsequent instructions and warnings are serious - follow without exception. Your life and the lives of others depend on it!

Cover photo may show optional equipment not supplied with standard unit.

© Copyright 2015 Printed 12/15/15



Important Safety Information	1	Section 4: Operating Instructions	20
Safety at All Times	1	Operating Checklist	20
Look For The Safety Alert Symbol	1	Safety Information	20
Safety Labels	4	Inspection of Tractor & Cutter	21
Introduction:	8	Transporting	22
Application	8	Blade Engagement & Disengagement	22
Using This Manual	8	Blade Engagement	22
Terminology:	8	Blade Disengagement	22
Definitions:	8	Field Operation	22
Owner Assistance	8	Unhook Rotary Cutter	23
Serial Number	8	General Operating Instructions	23
Further Assistance	8	Section 5: Maintenance & Lubrication	24
Section 1: Assembly & Set-up	9	Maintenance	24
Tractor Requirements	9	Cutter Blade Maintenance	24
Torque Requirements	9	Flex Coupler & Blade Timing	25
Uncrating Instructions	9	Driveline Protection	26
Vented Breather Plug Installation	9	Clutch Run-In	26
3-Point Hitch Assembly	10	Clutch Assembly and Disassembly	26
Tractor Hook-Up	10	Skid Shoe Maintenance (Accessory)	27
Quick Hitch Hook-up	10	Long Term Storage	27
Driveline Installation	11	Ordering Replacement Parts	27
Check Driveline Collapsible Length	12	Lubrication	28
Shorten Driveline	12	Gauge Wheel Spindle Tube	28
Check Driveline Maximum Length	13	Gauge Wheel Hub	28
Check Driveline Interference	13	Gearbox	28
Section 2: Options & Accessories	14	Flex Coupling Shaft	29
Skid Shoe Accessory	14	Driveline U-Joints	29
Front and Rear Guards	14	Driveline Shield Bearings	29
Front Corner Deflectors (Standard)	14	Driveline Profiles	29
Front Rubber Guard (Option)	14	Type of Lubrication: Multi-purpose Grease	29
Front Single Chain Guard (Option)	14	Section 6: Specifications & Capacities	30
Rear Metal Band Guard (Standard)	16	Section 7: Features & Benefits	32
RCD Rear Extended Metal Guard (Option)	16	Section 8: Troubleshooting	33
Section 3: Adjustments	18	Section 9: Torque values Chart	34
Deck Leveling & Cutting Height	18	Section 10: Warranty	35
Deck Leveling From Left to Right	18		
Deck Cutting Height	18		
Tailwheel Height Adjustment	19		
Center 3-Point Link Adjustment	19		



© Copyright 2015 All rights Reserved

Land Pride provides this publication "as is" without warranty of any kind, either expressed or implied. While every precaution has been taken in the preparation of this manual, Land Pride assumes no responsibility for errors or omissions. Neither is any liability assumed for damages resulting from the use of the information contained herein. Land Pride reserves the right to revise and improve its products as it sees fit. This publication describes the state of this product at the time of its publication, and may not reflect the product in the future.

Land Pride is a registered trademark.

All other brands and product names are trademarks or registered trademarks of their respective holders.

Printed in the United States of America.

These are common practices that may or may not be applicable to the products described in this manual.

Safety at All Times

Thoroughly read and understand the instructions given in this manual before operation. Refer to the "Safety Label" section, read all instructions noted on them.

Do not allow anyone to operate this equipment who has not fully read and comprehended this manual and who has not been properly trained in the safe operation of the equipment.

- ▲ The operator must not use drugs or alcohol as they can change the alertness or coordination of that person while operating equipment. The operator should, if taking over-the-counter drugs, seek medical advice on whether he/she can safely operate the equipment.
- ▲ Operator should be familiar with all functions of the tractor and attachments, and be able to handle emergencies quickly.
- ▲ Make sure all guards and shields are in place and secured before operating implement.
- ▲ Keep all bystanders away from equipment and work area.
- ▲ Operator must start tractor and operate controls from the driver's seat only. Never from the ground.
- ▲ Do not leave tractor or implement unattended with engine running.
- ▲ Dismounting from a moving tractor can cause serious injury or death.
- ▲ Do not allow anyone to stand between tractor and implement while backing up to implement.
- ▲ Keep hands, feet, and clothing away from power-driven parts.
- ▲ Watch out for fences, trees, rocks, wires, etc., while operating and transporting implement.
- ▲ Turning tractor too tight may cause hitched machinery to ride up on wheels. This could result in injury or equipment damage.

Look For The Safety Alert Symbol



The SAFETY ALERT SYMBOL indicates there is a potential hazard to personal safety involved and extra safety precaution must be taken. When you see this symbol, be alert and carefully read the message that follows it. In addition to design and configuration of equipment, hazard control, and accident prevention are dependent upon the awareness, concern, prudence, and proper training of personnel involved in the operation, transport, maintenance, and storage of equipment.

Be Aware of Signal Words

A Signal word designates a degree or level of hazard seriousness. The signal words are:

⚠ DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations, typically for machine components that, for functional purposes, cannot be guarded.

⚠ WARNING

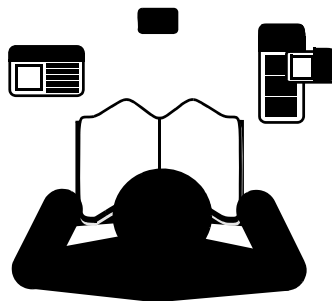
Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

⚠ CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

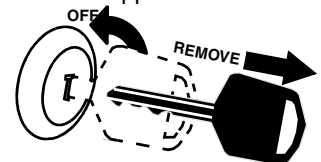
For Your Protection

- ▲ Thoroughly read and understand the "Safety Label" section, read all instructions noted on them.



Tractor Shutdown & Storage

- ▲ If engaged, disengage PTO.
- ▲ Lower attached implement to ground, put tractor in park or set park brake, turn off engine, and remove switch key to prevent unauthorized starting.
- ▲ Wait for all components to come to a complete stop before leaving the operator's seat.
- ▲ Detach and store implement in an area where children normally do not play. Secure implement using blocks and supports.



Parts Manual QR Locator

The QR (Quick Reference) code on the front cover and to the left will take you to the Parts Manual for this equipment. Download the appropriate App on your smart phone, open the App, point your phone on the QR code and take a picture.



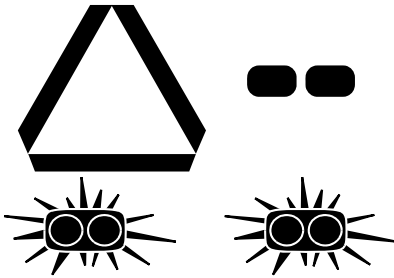
Dealer QR Locator

The QR code on the left will link you to available dealers for Land Pride products. Refer to Parts Manual QR Locator on this page for detailed instructions.

These are common practices that may or may not be applicable to the products described in this manual.

Use Safety Lights and Devices

- ▲ Slow moving tractors, self-propelled equipment, and towed implements can create a hazard when driven on public roads. They are difficult to see, especially at night.
- ▲ Flashing warning lights and turn signals are recommended whenever driving on public roads.



Transport Machinery Safely

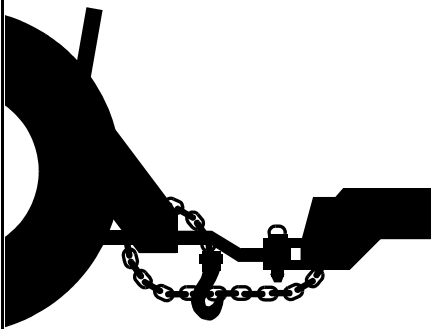
- ▲ Comply with state and local laws.
- ▲ Use towing vehicle and trailer of adequate size and capacity.
- ▲ Secure equipment towed on a trailer with tie downs and chains.
- ▲ Sudden braking can cause a trailer to swerve and upset. Reduce speed if trailer is not equipped with brakes.
- ▲ Avoid contact with any over head utility lines or electrically charged conductors.
- ▲ Engage park brake when stopped on an incline.

- ▲ Maximum transport speed for an attached implement is 20 mph. DO NOT EXCEED. Never travel at a speed which does not allow adequate control of steering and stopping. Some rough terrains require a slower speed.
- ▲ As a guideline, use the following maximum speed weight ratios for an attached implement:
 - 20 mph** when weight of attached implement is less than or equal to the weight of machine towing the implement.
 - 10 mph** when weight of attached implement exceeds weight of machine towing implement but not more than double the weight.
- ▲ **IMPORTANT:** Do not tow a load that is more than double the weight of the machine towing the load.



Use A Safety Chain

- ▲ A safety chain will help control drawn machinery should it separate from the tractor drawbar.
- ▲ Use a chain with the strength rating equal to or greater than the gross weight of the towed machinery.
- ▲ Attach the chain to the tractor drawbar support or other specified anchor location. Allow only enough slack in the chain to permit turning.
- ▲ Do not use safety chain for towing.



Practice Safe Maintenance

- ▲ Understand procedure before doing work. Use proper tools and equipment, refer to Operator's Manual for additional information.
- ▲ Work in a clean dry area.
- ▲ Lower attached implement to the ground, put tractor in park, turn off engine, and remove key before performing maintenance.
- ▲ Allow implement to cool before working on it.
- ▲ Disconnect battery ground cable (-) before servicing or adjusting electrical systems or before welding on implement.

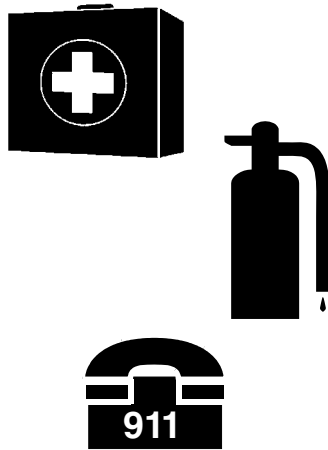
- ▲ Do not grease or oil implement while it is in operation.
- ▲ Inspect all parts. Make certain parts are in good condition & installed properly.
- ▲ Replace parts on this machine with genuine Land Pride parts only. Do not alter this machine in a way which will adversely affect its performance.
- ▲ Remove buildup of grease, oil, or debris.
- ▲ Remove all tools and unused parts from implement before operation.



These are common practices that may or may not be applicable to the products described in this manual.

Prepare for Emergencies

- ▲ Be prepared if a fire starts.
- ▲ Keep a first aid kit and fire extinguisher handy.
- ▲ Keep emergency numbers for doctor, ambulance, hospital, and fire department near phone.



Wear Protective Equipment

- ▲ Wear protective clothing and equipment appropriate for the job such as safety shoes, safety glasses, hard hat, and ear plugs.
- ▲ Clothing should fit snug without fringes and pull strings to avoid entanglement with moving parts.
- ▲ Prolonged exposure to loud noise can cause hearing impairment or hearing loss. Wear suitable hearing protection such as earmuffs or earplugs.
- ▲ Operating equipment safely requires the operator's full attention. Avoid wearing radio headphones while operating machinery.



Avoid High Pressure Fluids Hazard

- ▲ Escaping fluid under pressure can penetrate the skin causing serious injury.
- ▲ Avoid the hazard by relieving pressure before disconnecting hydraulic lines or performing work on the system.
- ▲ Make sure all hydraulic fluid connections are tight and all hydraulic hoses and lines are in good condition before applying pressure to the system.
- ▲ Use a piece of paper or cardboard, NOT BODY PARTS, to check for suspected leaks.
- ▲ Wear protective gloves and safety glasses or goggles when working with hydraulic systems.
- ▲ **DO NOT DELAY.** If an accident occurs, see a doctor familiar with this type of injury immediately. Any fluid injected into the skin or eyes must be treated within a few hours or gangrene may result.



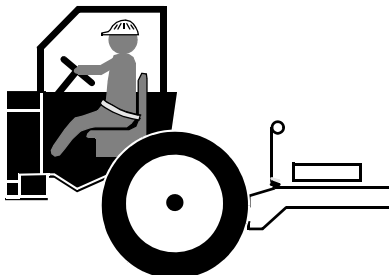
Tire Safety

- ▲ Tire changing can be dangerous and should be performed by trained personnel using the correct tools and equipment.
- ▲ When inflating tires, use a clip-on chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly. Use a safety cage if available.
- ▲ When removing and installing wheels, use wheel handling equipment adequate for the weight involved.



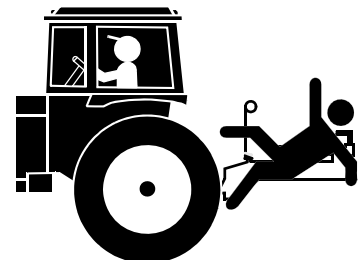
Use Seat Belt and ROPS

- ▲ Operate only tractors equipped with a Roll-Over Protective Structure (ROPS) and seat belt.
- ▲ Keep folding ROPS in the "locked up" position at all times.
- ▲ Fasten seat belt snugly and securely to help protect against serious injury or death from falling and machine overturn.
- ▲ Wear protective equipment such as a hard hat, safety shoes, safety glasses, and ear plugs.



Keep Riders Off Machinery

- ▲ Never carry riders or use machinery as a person lift.
- ▲ Riders obstruct operator's view.
- ▲ Riders could be struck by foreign objects or thrown from the machine.
- ▲ Never allow children to operate equipment.



Safety Labels

Your Rotary Cutter comes equipped with all safety labels in place. They were designed to help you safely operate your implement. Read and follow their directions.

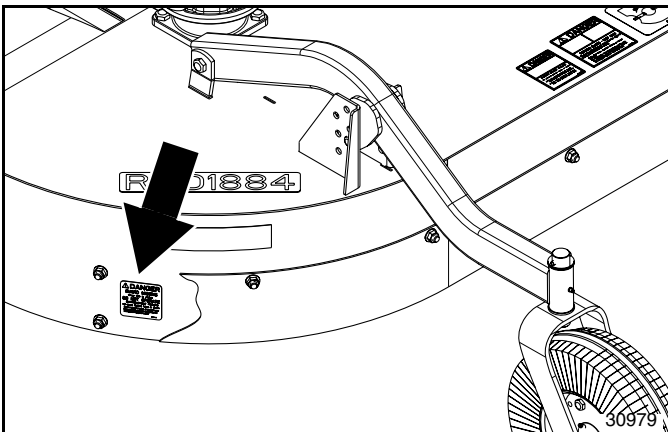
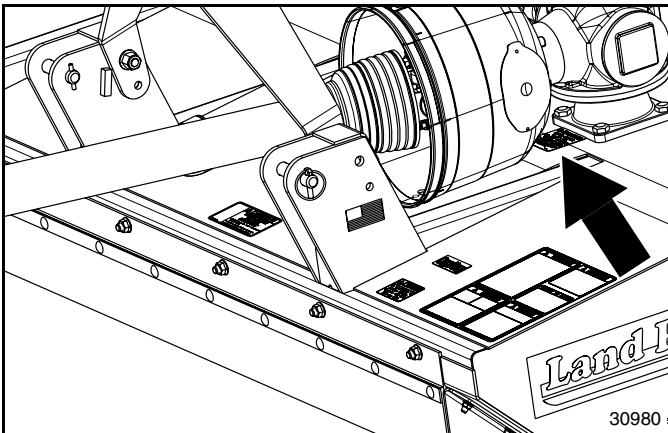
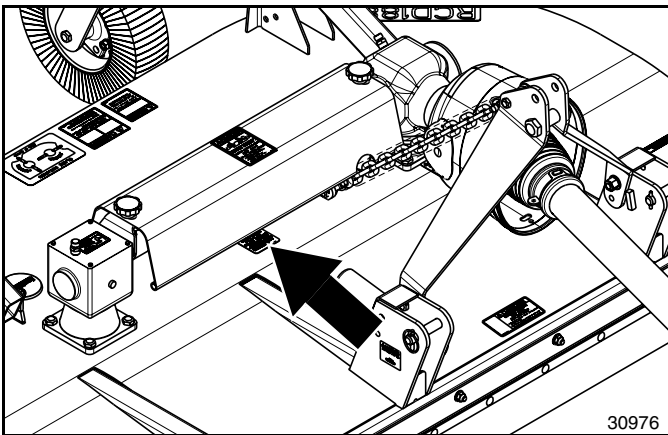
1. Keep all safety labels clean and legible.
2. Refer to this section for proper label placement. Replace all damaged or missing labels. Order new labels from your nearest Land Pride dealer. To find your nearest dealer, visit our dealer locator at www.landpride.com.
3. Some new equipment installed during repair requires safety labels to be affixed to the replaced component as

specified by Land Pride. When ordering new components make sure the correct safety labels are included in the request.

4. Refer to this section for proper label placement.

To install new labels:

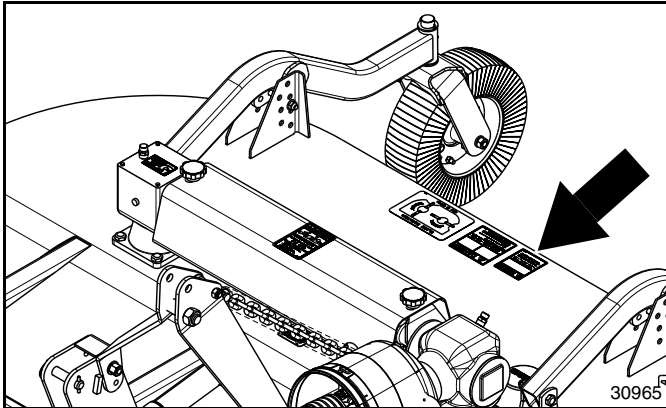
- a. Clean surface area where label is to be placed.
- b. Spray soapy water onto the cleaned area.
- c. Peel backing from label and press label firmly onto the surface.
- d. Squeeze out air bubbles with edge of a credit card or with a similar type of straight edge.



818-543C

Danger: Guard Missing

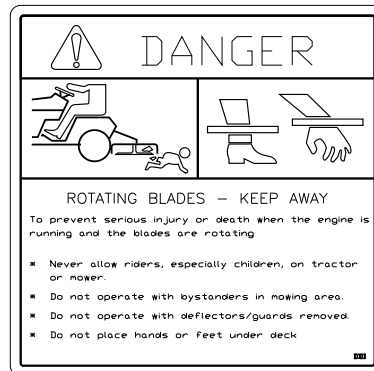
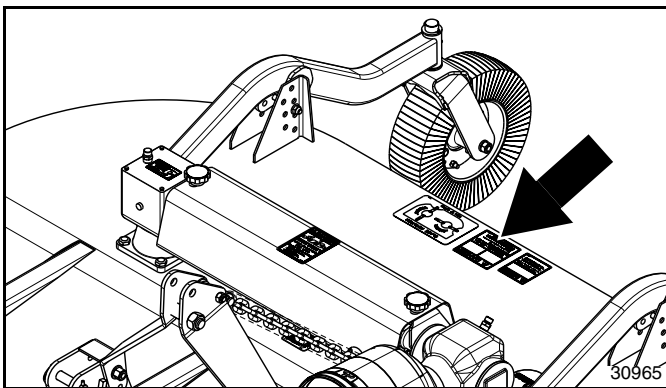
3 - Places: Middle center, beneath gearbox input shaft, and back left corner of deck.



818-556C

Danger: Thrown Object

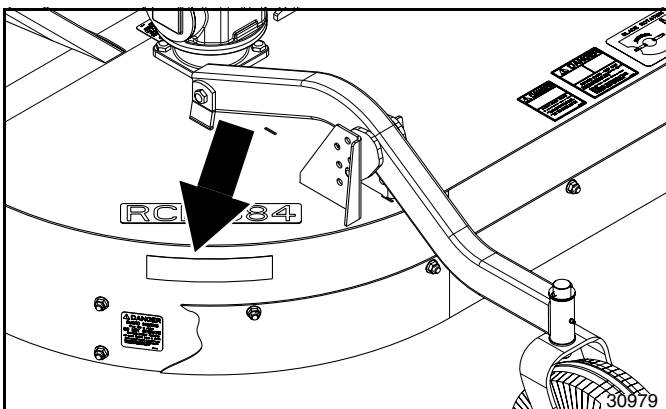
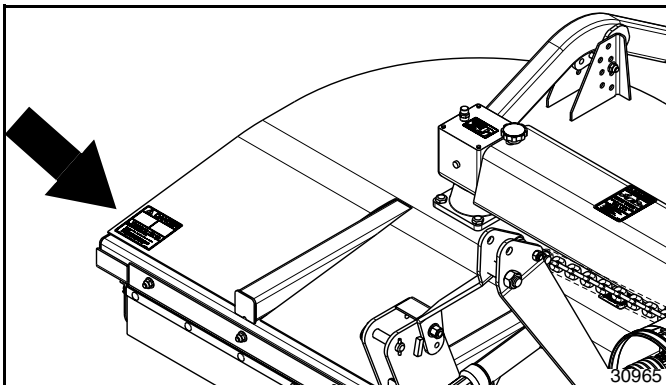
1 - Place: Back middle of deck.



818-564C

Danger: Rotating Blades

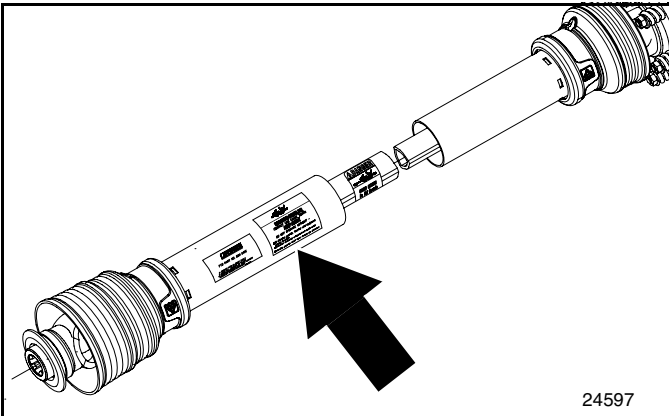
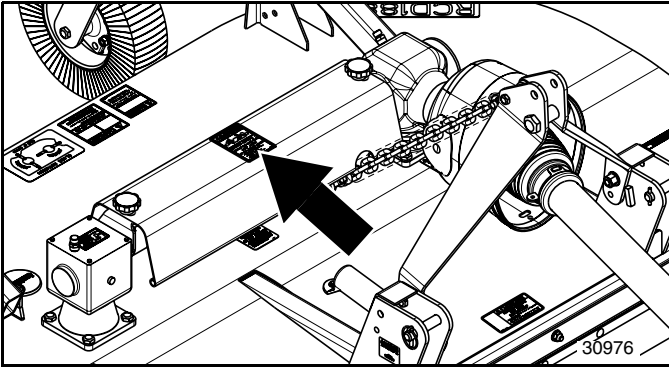
2 - Places: Back middle and front right corner of deck.



838-614C

2" x 9" Red Reflector

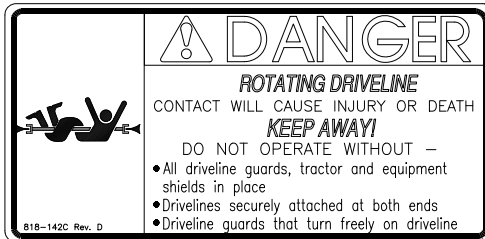
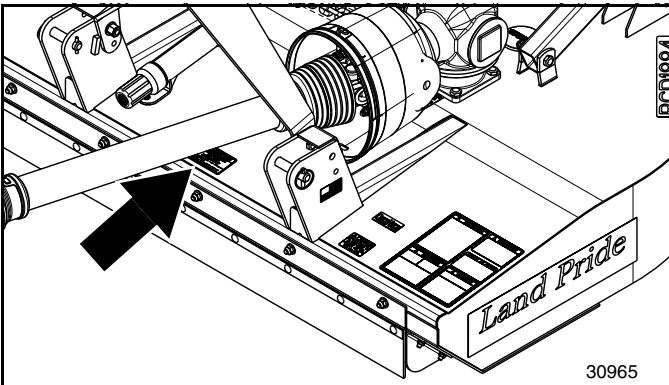
2 - Places: Back rounding corners of deck.



818-552C

Danger: Rotating Driveline

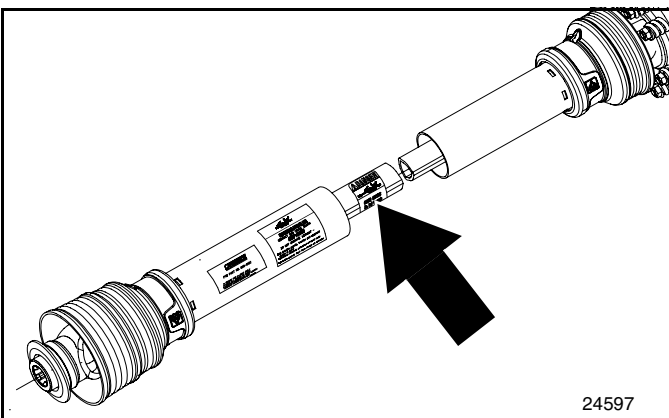
2 - Places: Top of intermediate driveline guard and on main driveline shield.



818-142C

Danger: Rotating Driveline

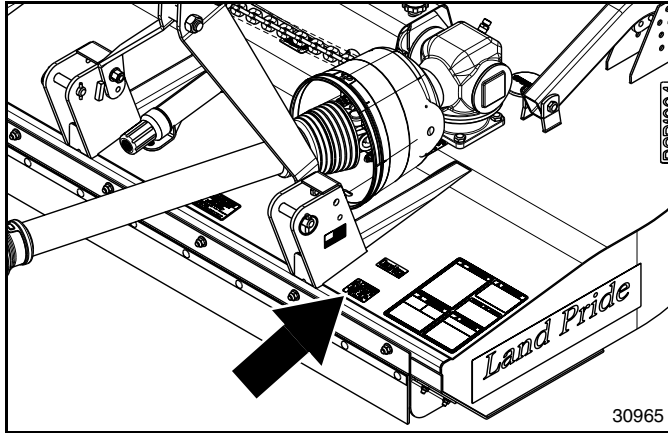
1 - Place: Front middle of deck



818-540C

Danger: Guard Missing

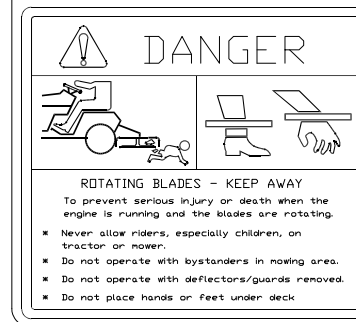
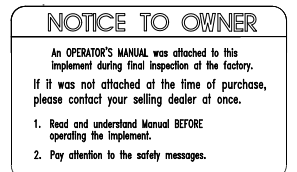
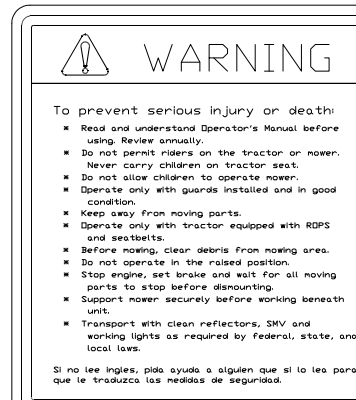
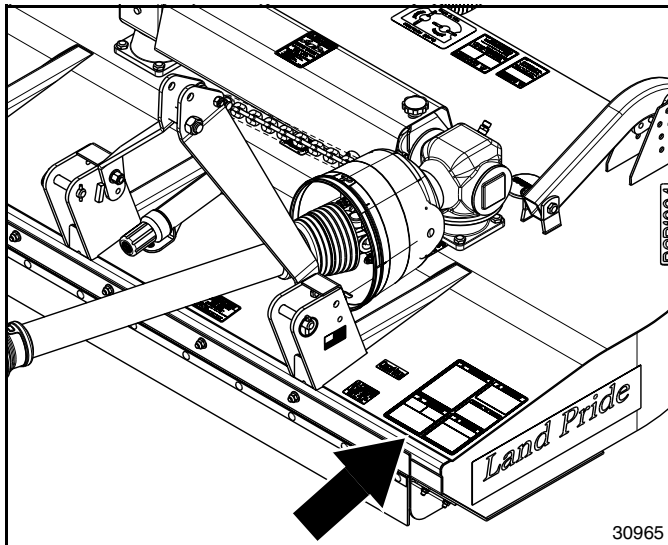
1 - Place: On profile of main driveline.



818-130C

Caution: 540 RPM

1 - Place: Front left corner of deck.



818-830C

Safety Combo

1 - Place: Front left corner of deck.

Introduction:

Land Pride welcomes you to the growing family of new product owners.

This Rotary Cutter has been designed with care and built by skilled workers using quality materials. Proper assembly, maintenance, and safe operating practices will help you get years of satisfactory use from this machine.

Application

The Land Pride RCD1884 offset Rotary Cutter is designed and built to clear grass, weeds, and light brush up to 1 1/2 inches in diameter from areas under orchard and grove trees, beneath over-hanging hedge rows, or under fence lines and guard railings. The unit offsets 10" to the right with rear mounted 360 degree rotating tailwheels making it well suited for operation on gentle slopes and mildly contoured approaches immediately adjacent to ponds, lakes, streams, drainage ditches, and roadways. The seven foot cutting width and 2" to 12" cutting height makes it well suited for mowing pastures, set aside acres, and row crop fields.

The RCD1884 is compatible with 35 to 60 horsepower tractors with a category I three point hitch and is Quick Hitch adaptable. It operates at 540 rpm PTO speed and is protected with a category 3 driveline with a 2-plate slip clutch. Supplied with the cutter is a stump jumper, front rubber shield and rear metal band shield.

See “**Specifications & Capacities**” on page 30 and “**Features & Benefits**” on page 32 for additional information and performance enhancing options.

Using This Manual

- This Operator’s Manual is designed to help familiarize the operator with safety, assembly, operation, adjustments, troubleshooting, and maintenance. Read this manual and follow the recommendations to help ensure safe and efficient operation.
- The information contained within this manual was current at the time of printing. Some parts may change slightly to assure you of the best performance.
- To order a new Operator’s or Parts Manual, contact your authorized dealer. Manuals can also be downloaded, free-of-charge, from our website at www.landpride.com.

Terminology:

“Right” or “Left” as used in this manual is determined by facing the direction the machine will operate while in use unless otherwise stated.

Definitions:

IMPORTANT: A special point of information related to the following topic. Land Pride’s intention is this information must be read & noted before continuing.

NOTE: A special point of information that the operator should be aware of before continuing.

Owner Assistance

The Online Warranty Registration or Warranty Registration card should be completed by the dealer at the time of purchase. This information is necessary to provide you with quality customer service.

The parts on your Rotary Cutter have been specially designed by Land Pride and should only be replaced with genuine Land Pride parts. Contact a Land Pride dealer if customer service or repair parts are required. Your Land Pride dealer has trained personnel, repair parts, and equipment needed to service the implement.

Serial Number

Model No. _____ Serial No. _____

For quick reference and prompt service, record model number and serial number in the spaces provided above and again on warranty page 35. Always provide model number and serial number when ordering parts and in all correspondences with your Land Pride dealer. Refer to Figure 1 for location of your serial number.

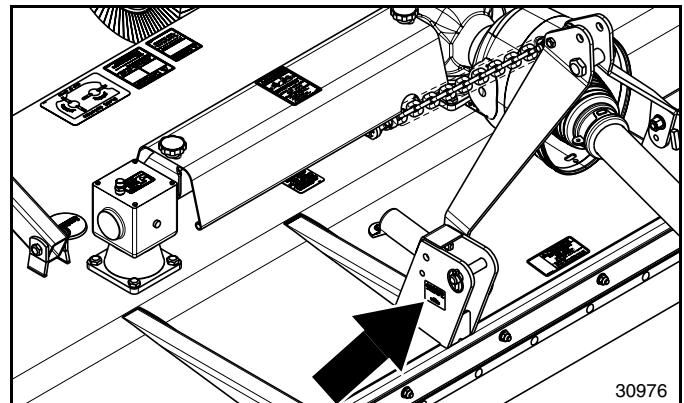


Figure 1

Further Assistance

Your dealer wants you to be satisfied with your new Rotary Cutter. If for any reason you do not understand any part of this manual or are not satisfied with the service received, the following actions are suggested:

1. Discuss the matter with your dealership service manager making sure that person is aware of any problems you may have and has had the opportunity to assist you.
2. If you are still not satisfied, seek out the owner or general manager of the dealership, explain the problem, and request assistance.
3. For further assistance write to:

Land Pride Service Department

1525 East North Street

P.O. Box 5060

Salina, KS. 67402-5060

E-mail address

lp servicedept@landpride.com

Section 1: Assembly & Set-up

Tractor Requirements

Tractor horsepower and hitch category should be within the range noted below. Tractors outside the horsepower range must not be used.

Tractor Horsepower Rating	35 to 60 HP
Hitch Category	Cat I
PTO Speed	540 RPM
PTO Shaft Type	1 3/8"-6 Spline

WARNING

Ballast weights may need to be added to your tractor to maintain steering control. Refer to your tractor operator's manual to determine proper ballast requirements.

Torque Requirements

Refer to "Torque Values Chart for Common Bolt Sizes" on page 34 to determine correct torque values when tightening hardware. See "Additional Torque Values" at bottom of chart for exceptions to common torque values.

Uncrating Instructions

WARNING

Always secure cutter with an overhead crane, fork lift, or other suitable lifting device before removing hardware bags, shipping components, bands, lag screws, and hitch pins. The cutter can suddenly fall causing serious injury or death.

IMPORTANT: Do not attach hoist to gauge wheel forks or gauge wheel arms near the spindles. The arms and/or forks can bend when lifting cutter.

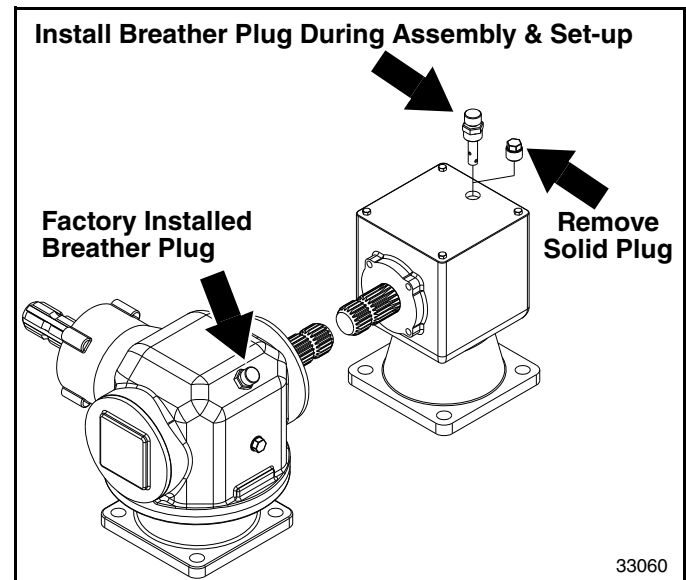
1. Secure cutter with a hoist or other lifting device before removing shipping hardware.
2. Remove lag screws securing front face of cutter to the crate.
3. Using lifting device, remove tension on hitch pins securing clevis plates to shipping crate.
4. Remove hitch pins from clevis plates and lift cutter from shipping crate. Gently lower unit onto the floor.

Vented Breather Plug Installation

Refer to Figure 1-1:

IMPORTANT: Rotary Cutters are shipped with a solid plug in the gearbox to prevent loss of oil during shipping and handling. The solid plug on top of the gearbox must be replaced with a vented dipstick. Do not operate cutter without vented dipstick installed.

The right angle gearbox is shipped with vented breather plug factory installed. The other gearbox is shipped with vented breather plug packaged with the Operator's Manual in the manual tube. Remove temporary solid plug from top of gearbox and replace with vented breather plug. See your nearest Land Pride dealer if breather plug is missing.

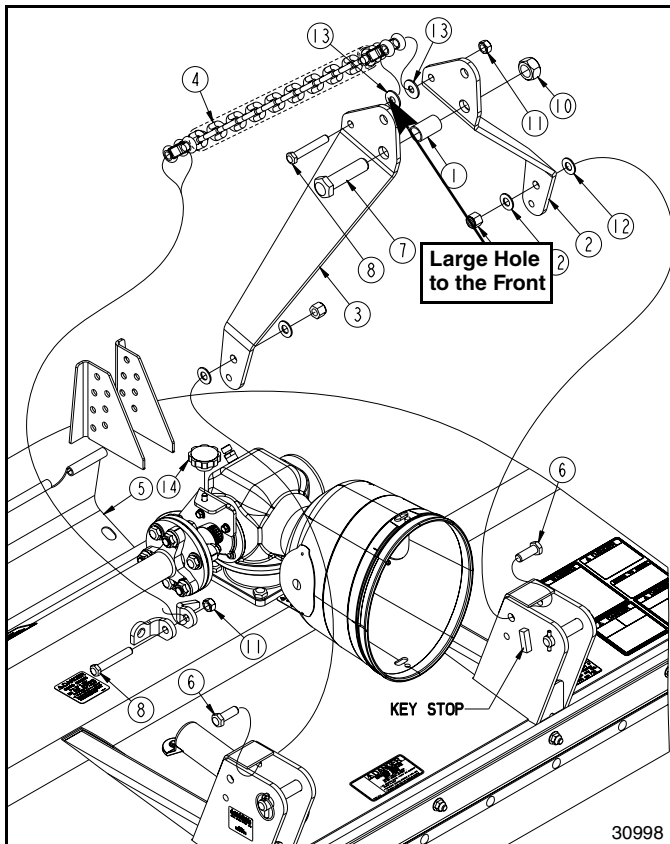


Vented Breather Plug Installation
Figure 1-1

3-Point Hitch Assembly

Refer to Figure 1-2:

1. Attach left-hand hitch plate (#2) to upper mounting hole in clevis plate with 5/8"-11 x 1 3/4" GR5 cap screw (#6), two flat washers (#12), and hex nylock nut (#9). Draw nylock nut up snug, do not tighten.
2. Attach right-hand hitch plate (#3) to upper mounting hole in clevis plate with 5/8"-11 x 1 3/4" GR5 cap screw (#6), two flat washers (#12), and hex nylock nut (#9). Draw nylock nut up snug, do not tighten.
3. Rotate top of hitch plates (#2 & #3) back until bottom of hitch plates rest against the key stops.



Hitch Assembly
Figure 1-2

4. Attach 2 1/16" long bushing (#1) to left and right-hand hitch plates (#2 & #3) with 1"-8 x 4" GR5 hex head cap screw (#7) and hex top locknut (#10). Tighten top locknut (#10) to torque value listed under "Additional Torque Values" on page 34.
5. Attach one end of float chain (#4) between hitch plates (#2 & #3) with 9/16"-12 x 3 1/2" GR5 cap screw (#8), two flat washers (#13), and hex top locknut (#11). Draw locknut (#11) up snug, do not tighten.
6. Remove hand knobs (#14) and rotate flex coupler shield open.
7. Attach opposite end of float chain (#4) to deck lugs with 9/16"-12 x 3 1/2" GR5 cap screw (#8) and top locknut (#11). Draw locknut up snug, do not tighten.

8. Rotate outer coupler shield closed and replace existing hand knobs (#14). Hand tighten hand knobs.

Tractor Hook-Up

Refer to Figure 1-3 on page 11:



DANGER

A Crushing Hazard exists when hooking-up equipment to a tractor. Do not allow anyone to stand between tractor and implement while backing-up to implement. Do not operate hydraulic 3-point lift controls while someone is directly behind tractor or near implement.

NOTE: Land Pride's Quick Hitch can be attached to the tractor to provide quick and easy 3-point hook-up and detachment. See your nearest Land Pride dealer to purchase a Quick-Hitch.

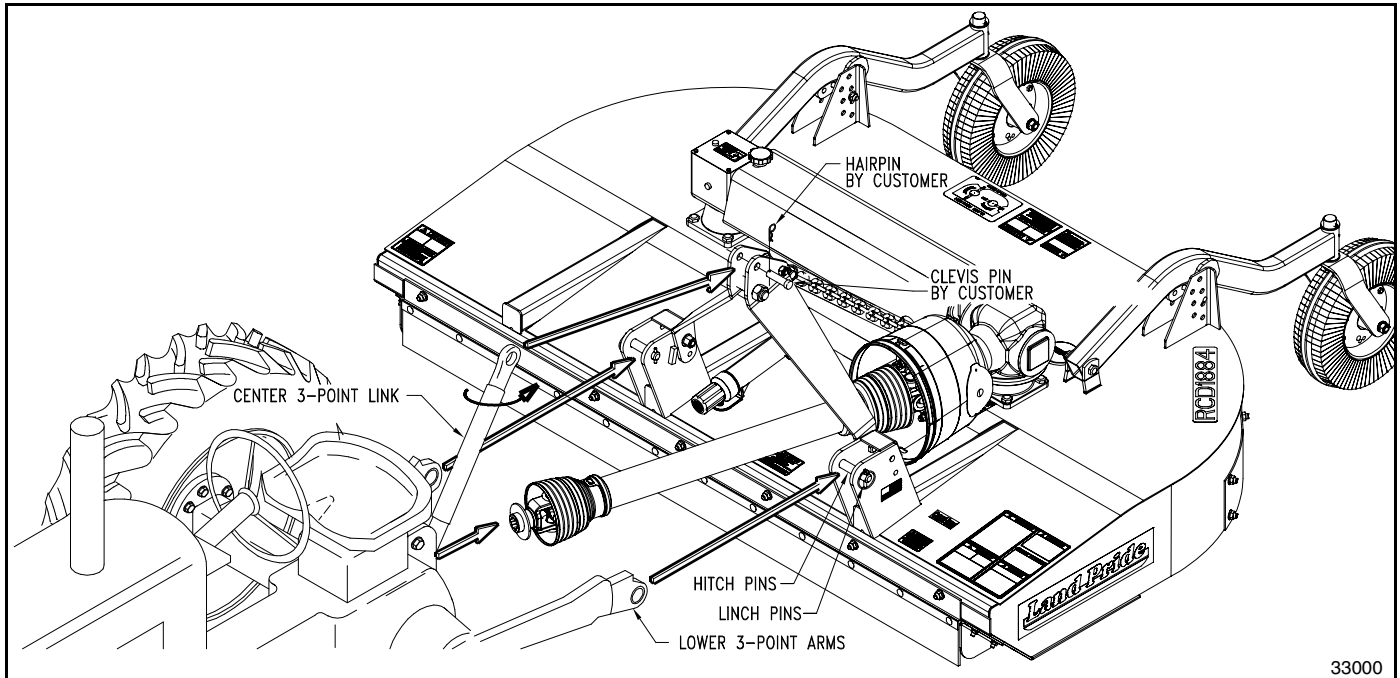
A 3-Point Category I or II hitch is required. The lower 3-Point arms of the 3-Point hitch must be stabilized to prevent side-to-side movement. Most tractors have sway blocks or adjustable chains for this purpose.

1. Locate cutter on a flat level surface.
2. Slowly back tractor up to Rotary Cutter while using tractor's 3-Point hydraulic control to align lower 3-Point arm holes with clevis lug holes on the cutter.
3. Engage tractor park brake, shut tractor engine off, and remove key before dismounting from tractor.
4. Attach lower arms to clevis plates with hitch pins and secure with linch pins.
5. Connect top center 3-Point link to upper pivot hitch with clevis pin and hairpin cotter supplied by the customer.
6. Return to the tractor. Slowly raise and lower implement carefully to ensure that the drawbar, tires, and other equipment on the tractor do not contact cutter frame. Move or remove drawbar if it interferes with the cutter.
7. Manually adjust one of the two lower lift arms up or down to level the Rotary Cutter from left to right.
8. Manually adjust the length of the top-link to level the Rotary Cutter from front to rear. Final deck leveling adjustments will be made later.
9. The 3-Point lift cylinders on your tractor should be adjusted to allow for lateral float. Please consult your tractor's manual for adjusting instructions.

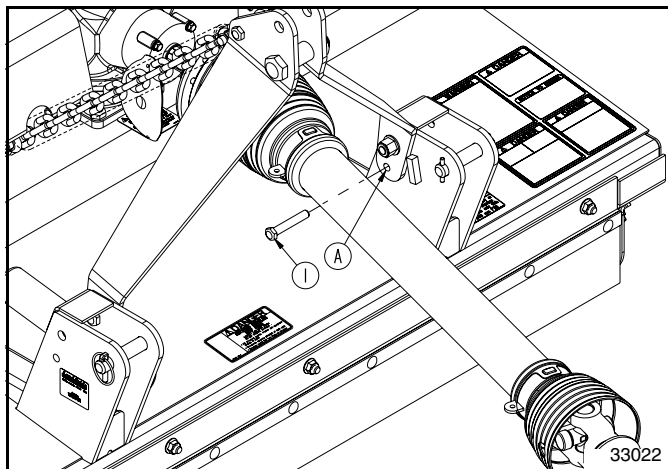
Quick Hitch Hook-up

Refer to Figure 1-4 on page 11:

If 3-Point hitch plates won't stay upright for Quick Hitch attachment, a hitch pin or bolt (#1) may be inserted into hole "A" to stabilize hitch plates. Be sure to remove hitch pin before connecting driveline to the tractor. Hitch pin or bolt is supplied by customer.



Tractor Hook-Up
Figure 1-3



Quick Hitch Hook-up
Figure 1-4

! WARNING

Always disengage PTO, put tractor in park or set park brake, shut tractor engine off, remove ignition key, and wait for blades to come to a complete stop before dismounting tractor.

! WARNING

Do not over-speed PTO or machine breakage may result. Some tractors are equipped with multispeed PTO ranges. Be certain your tractor's PTO does not exceed 540 RPM.

! WARNING

Do not use a PTO adapter. A PTO adapter will increase strain on the tractor's PTO shaft resulting in possible damage to shaft and driveline. It will also defeat the purpose of the tractor's master shield and could cause bodily injury or death.

IMPORTANT: An additional driveline may be required if cutter is to be used on more than one tractor, especially if a Quick Hitch is used.

The driveline must be lubricated before putting it into service. Refer to "**Lubrication**" on page 28.

The tractor's PTO shaft and cutter gearbox shaft must be aligned and level with each other when hooking-up the driveline to the tractor.

Driveline Installation

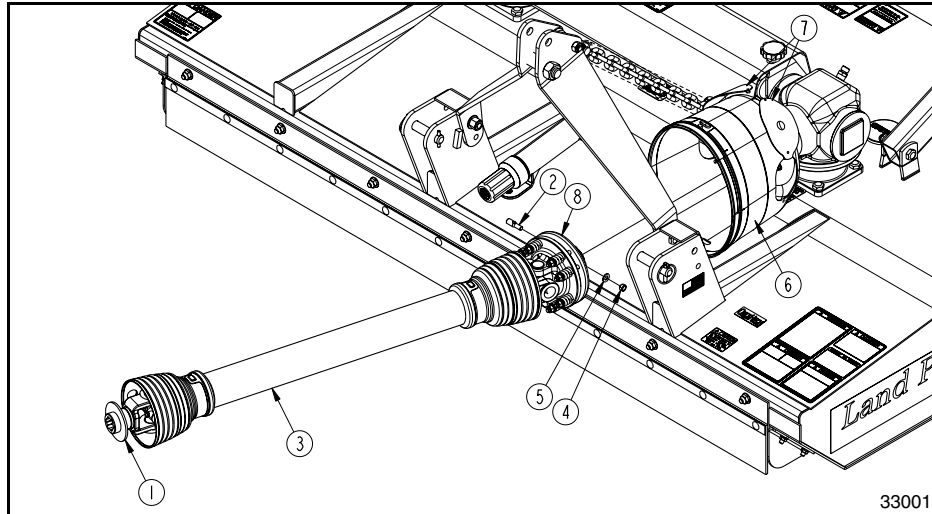
! DANGER

Do not engage tractor PTO while hooking-up and unhooking driveline or while someone is standing near the driveline. A person's body and/or clothing can become entangled in the driveline resulting in serious injury or death.

! DANGER

All guards and shields must be installed and in good working condition at all times during cutter operation.

1. Park tractor on a level surface. Slowly engage tractor 3-Point lift lever to raise cutter until gearbox shaft is in line and level with the tractor PTO shaft.
2. Support cutter deck at this height with support jacks or blocks to keep cutter from drifting down.
3. Place gear selector in park, set park brake, shut



Driveline Installation
Figure 1-5

tractor off, and remove switch key.

Refer to Figure 1-5:

4. Remove tapered pin (#2) from slip-clutch (#8).
5. Unsnap access doors (#7) from gearbox cone (#6) and rotate about the metal pin either up or down to gain access to the gearbox input spline shaft.
6. Slide slip-clutch end of driveline onto gearbox input shaft until holes in slip-clutch align with notch in gearbox shaft.
7. Insert tapered pin (#2) and secure with removed washer (#5) & hex nut (#4). Tighten hex nut to the correct torque.
8. Move slip-clutch back and forth several times to make sure it is locked onto gearbox shaft.
9. Replace access covers (#7).
10. Pull back on yoke collar (#1) and push driveline yoke onto the tractor PTO shaft. Release pull collar and continue to push driveline yoke forward until pull collar locks in place.
11. Move driveline yoke back and forth several times to make sure yoke is locked in place. If driveline yoke will not lock in place, skip to **“Check Driveline Collapsible Length”** on page 12.
12. Continue with **“Check Driveline Collapsible Length”**.

Check Driveline Collapsible Length

IMPORTANT: A driveline that is too long can bottom out causing structural damage to tractor and cutter. Always check driveline collapsed length during initial setup, when connecting to a different tractor, and when alternating between using a quick hitch and a standard 3-point hitch. More than one driveline may be required to fit all applications.

1. Make sure driveline is properly installed and level before checking driveline collapsible length. (Refer to **“Driveline Installation”** instructions on page 11.)

Refer to Figure 1-6 on page 13:

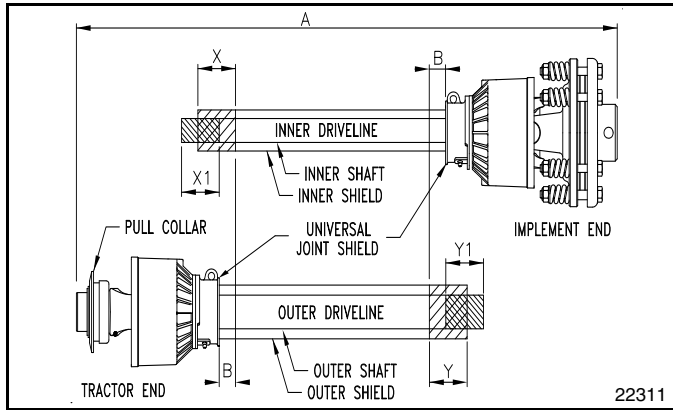
2. With driveline level, measure (“B” dimension) back from universal joint shield to end of outer driveline shield as shown in Figure 1-6. If measurement is less than 1", then shorten driveline using instructions provided below.
3. Skip to **“Check Driveline Maximum Length”** on page 13 if “B” dimension is 1" or more.

Shorten Driveline

Refer to Figure 1-6 on page 13:

Be sure to check driveline collapsed length first. If required, shorten driveline.

1. Unhook driveline from tractor PTO shaft. Pull outer and inner drivelines apart.
2. Reattach outer driveline to tractor PTO shaft. Pull on inner and outer driveline yokes to be sure universal joints are properly secured.
3. Hold inner and outer drivelines parallel to each other:
 - a. Measure 1" (“B” dimension) back from outer driveline universal joint shield and make a mark at this location on the inner driveline shield.
 - b. Measure 1" (“B” dimension) back from the inner driveline universal joint shield and make a mark at this location on the outer driveline shield.



Driveline Shortening
Figure 1-6

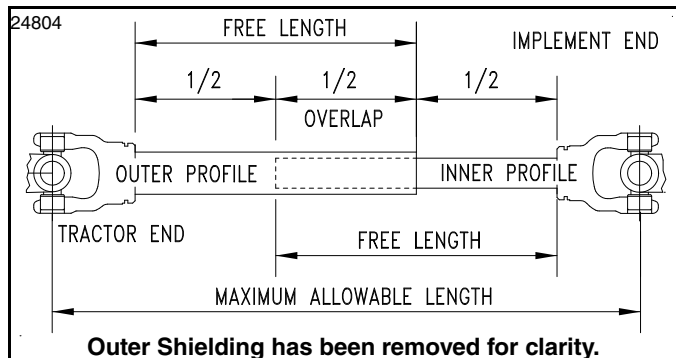
4. Remove driveline from tractor PTO shaft and gearbox shaft.
5. Measure from end of inner shield to scribed mark ("X" dimension). Cut off inner shield at the mark. Cut same amount off the inner shaft ("X1" dimension).
6. Measure from end of outer shield to scribed mark ("Y" dimension). Cut off outer shield at the mark. Cut same amount off the outer shaft ("Y1" dimension).
7. Remove all burrs and cuttings.
8. Continue with "Check Driveline Maximum Length".

Check Driveline Maximum Length

Refer to Figure 1-7:

The driveline maximum allowable length must, when fully extended, have a minimum overlap of profile tubes by not less than 1/2 the free length with both inner and outer profile tubes being of equal length.

1. Separate inner and outer profiles apart and apply multi-purpose grease inside the outer shaft.
2. Reassemble inner and outer driveline profiles together with just 1/2 overlapping of the profile tubes as shown. Once assembled, measure and record maximum allowable length here. _____



Driveline Maximum Extended Length
Figure 1-7

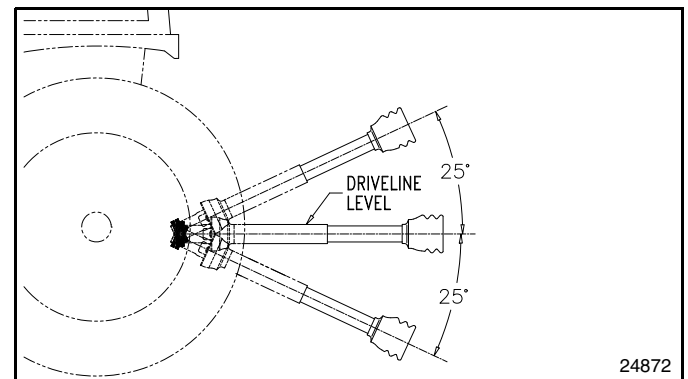
Check Driveline Interference

1. Make certain driveline yokes are properly attached.
2. Start tractor and raise Rotary Cutter just enough to remove support blocks from under the cutter.
3. Slowly engage tractor hydraulic 3-Point control lever to lower cutter while checking for sufficient drawbar clearance. Move drawbar ahead, aside, or remove if required.

Refer to Figure 1-8:

IMPORTANT: Avoid premature driveline breakdown. A driveline that is operating **must not exceed** an angle of 25 degrees up or down while operating 3-point lift.

4. With PTO off, raise implement fully up to make the following checks below. If driveline exceeds any of the limits listed, set tractor 3-Point lift limiter at a height that will keep the driveline within its lift limits and to avoid premature driveline breakdown.
 - Driveline does not exceed 25° up.
 - Driveline does not exceed maximum allowable length recorded in step 2 under "Check Driveline Maximum Length".



Maximum PTO Driveline Movement During Operation
Figure 1-8

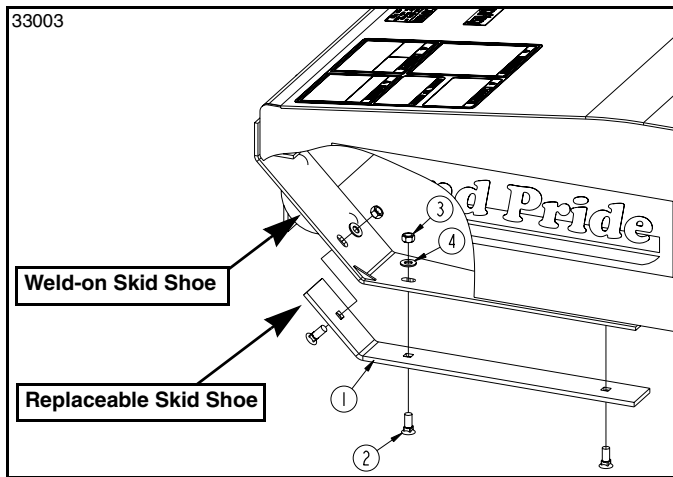
Skid Shoe Accessory

Refer to Figure 2-1:

326-341A RCD1884 SKID SHOES

The RCR1884 cutter is supplied with welded-on skid shoes. Replaceable skid shoes (Sold as an accessory) can be bolted to the weld-on skid shoes to increase protection against side panel wear.

1. Attach skid shoes (#1) to front left and right corners of the cutter with 3/8"-16 x 1" GR5 plow bolts (#2), flat washers (#4), and lock nuts (#3).
2. Tighten lock nuts to the correct torque.



**Skid Shoe Accessory
Figure 2-1**

Front and Rear Guards

Land Pride strongly recommends front and rear safety guards be installed on this cutter to help stop objects from being thrown out from under the cutter at high speeds. When cutting along highways and in areas where people or animals may be present, always use front and rear guards on your cutter.

Front Corner Deflectors (Standard)

Refer to Figure 2- 2 on page 15:

326-490L FRONT CORNER DEFLECTORS

Front corner deflectors are included with the cutter and should be installed before installing the front guard.

1. Install corner deflectors (#2) with 3/8"-16 x 1" GR5 carriage bolts (#3) and hex whiz nuts (#6). Draw nuts up snug, do not tighten.

Front Rubber Guard (Option)

Refer to Figure 2- 2 on page 15:

326-342A RCR1884 FRONT RUBBER GUARD

1. Install front rubber guards (#1) with 1/2"-13 x 1 1/4" GR5 carriage bolts (#4) and hex whiz nuts (#5). Draw nuts up snug, do not tighten.
2. Adjust front guard (#1) and corner deflectors (#2) to fit evenly against each other.
3. Tighten all whiz nuts (#5 & #6) to the correct torque.

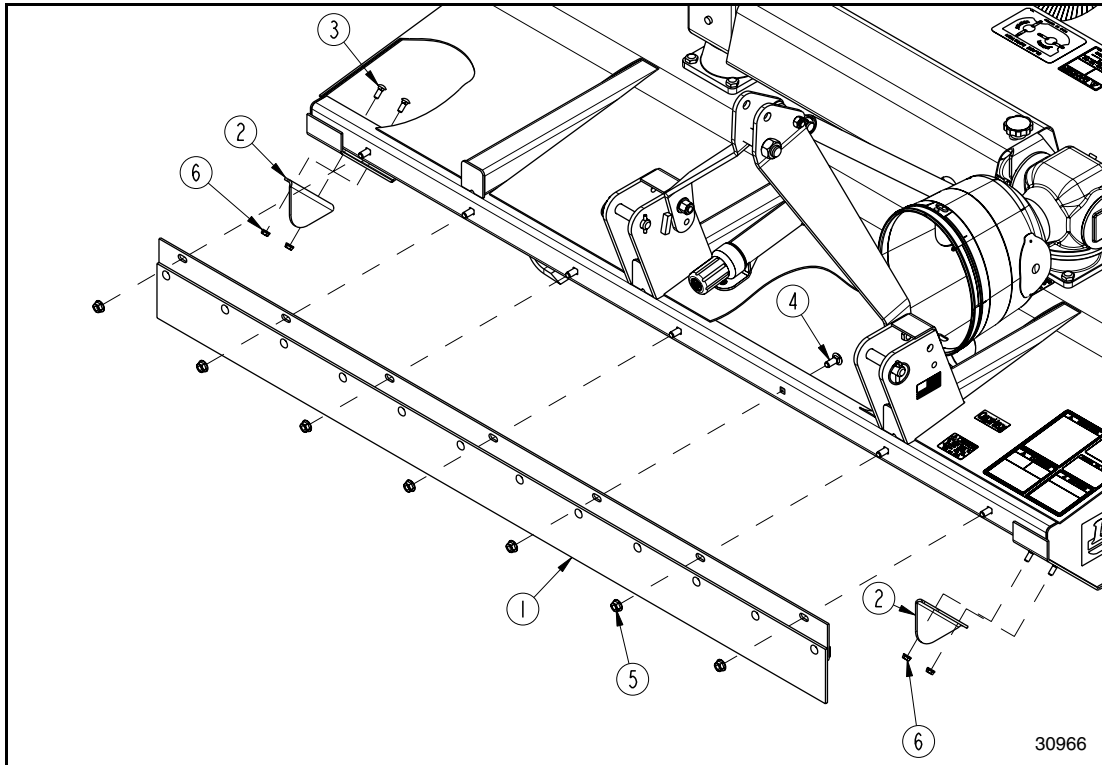
Front Single Chain Guard (Option)

Refer to Figure 2-3:

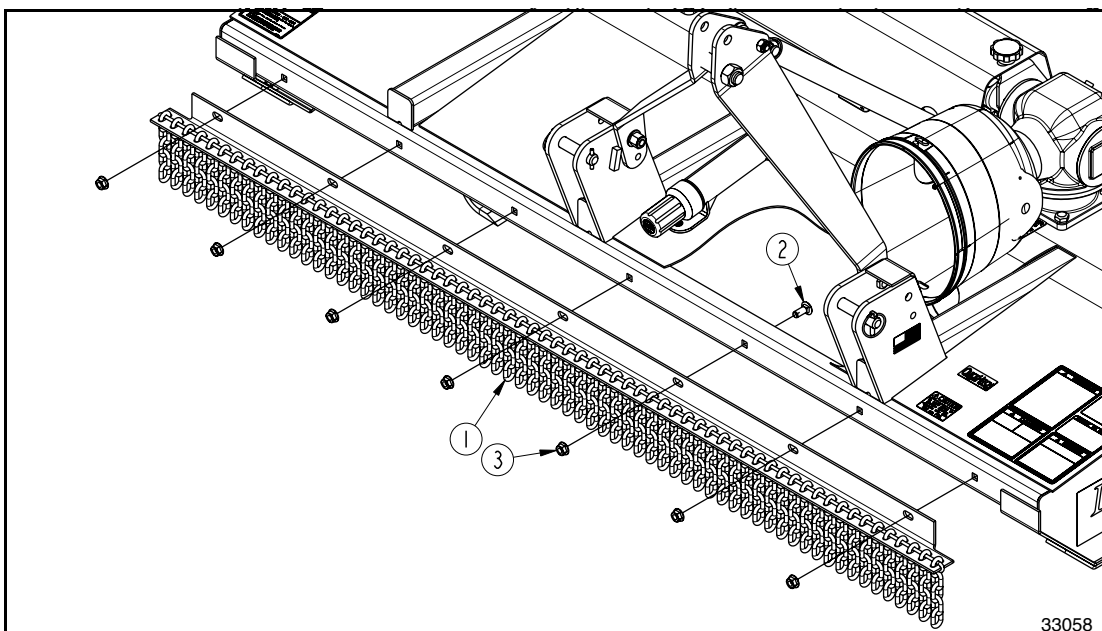
326-449A FRONT SINGLE CHAIN GUARD

The Single Chain Guard option provides a better flow of air under the cutter resulting in a more evenly discharge of cut material.

1. Attach front single chain guard (#1) to deck front with 1/2"-13 x 1 1/4" GR5 carriage bolts (#2) and hex whiz nuts (#3). Draw nuts up snug, do not tighten.
2. Adjust front chain guard (#1) and corner deflectors (#2 in Figure 2- 2) to fit evenly against each other.
3. Tighten all chain guard hex whiz nuts (#3) and corner deflector hex whiz nuts (#6 in Figure 2- 2) to the correct torque.



Front Rubber Guard
Figure 2-2



Front Single Chain Guard
Figure 2-3

Rear Metal Band Guard (Standard)

Refer to Figure 2-4 on page 17:

326-464A RCR1884 REAR METAL BAND Guard

This Rear Metal Band Guard is provided with the cutter unless the optional RCD Rear Extended Metal Guard is chosen when ordering the RCD1884 cutter from factory. It will need to be removed as follows before installing the RCD Rear Extended Metal Guard.



DANGER

Do not operator cutter without a rear guard. Do not remove rear guard unless it is replaced by an approved Land Pride guard. Serious body injury or loss of life can result without an attached rear guard.



CAUTION

The Rear Metal Band Guard is in spring tension and will want to snap straight as the hex whiz nuts are removed.

1. Be aware that the curved ends will want to pop up as each nut in the curved area is removed. Safely remove nuts 3A first, 3B second, 3C third, and 3D last.
2. Once all the nuts are safely removed, remove rear band guard (#1) and 1/2" carriage bolts (#2).
3. Store Rear Metal Band Guard and hardware for reuse later should the optional RCD Rear Guard becomes bent, cracked, or broken.

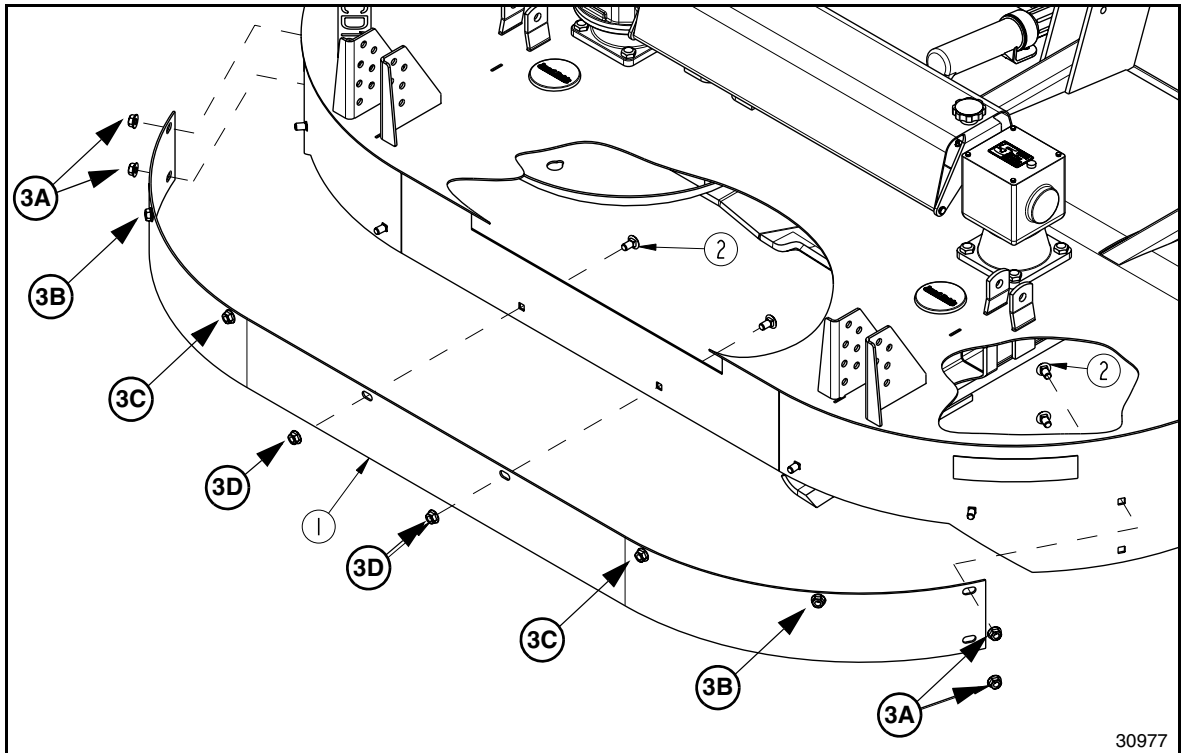
RCD Rear Extended Metal Guard (Option)

Refer to Figure 2-5 on page 17:

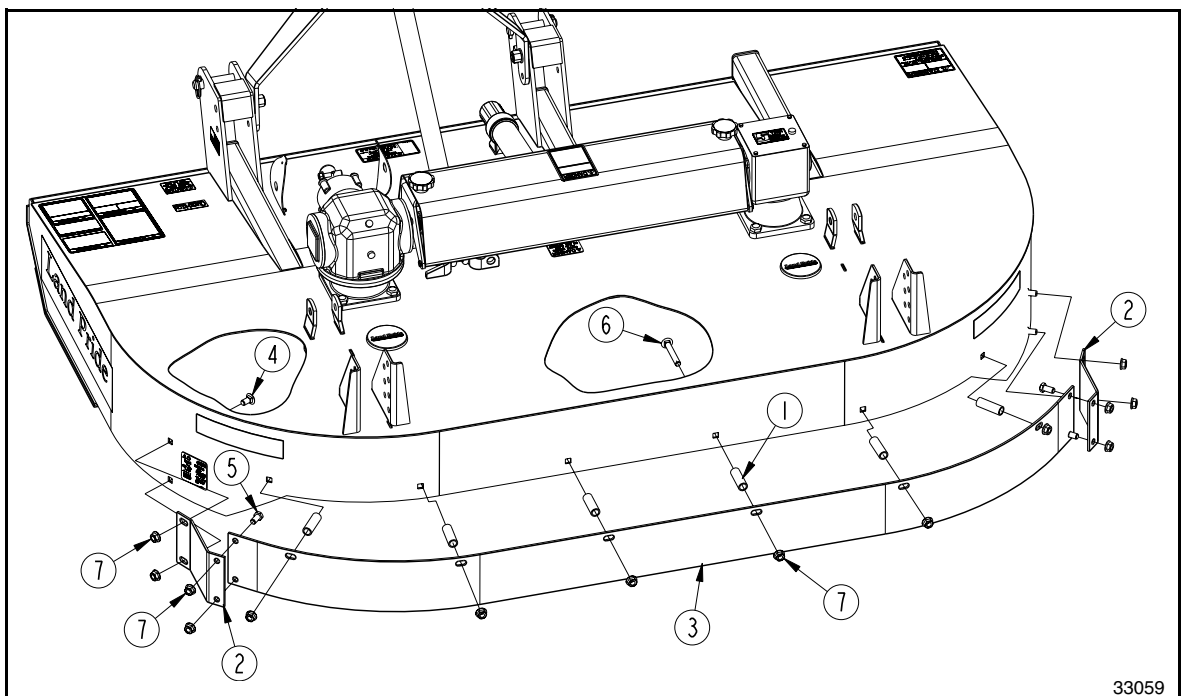
326-458A RCD REAR GUARD

This RCD Rear Extended Metal Guard is offset to provide a better flow of air under the cutter resulting in a more evenly discharge of cut material.

1. Attach rear deflector brackets (#2) to rear band deflector (#3) with 1/2"-13 x 1" GR5 cap screws (#5) and hex whiz nuts (#7). Draw nuts up snug.
2. Attach rear band deflector (#3) to deck rear with 1/2"-13 x 3 1/2" GR5 carriage bolts (#6), deflector spacer (#1), and hex whiz nuts (#7). Draw nuts up snug, do not tighten.
3. Attach rear deflector brackets (#2) to deck rear with 1/2"-13 x 1" GR5 carriage bolts (#4) and hex whiz nuts (#7). Draw nuts up snug, do not tighten.
4. Tighten all hex whiz nuts (#7) to the correct torque.



Rear Metal Guard
Figure 2-4



RCD Rear Metal Extended Guard (Option)
Figure 2-5

Section 3: Adjustments

Deck Leveling & Cutting Height

There are 4 primary adjustments that should be made prior to actual field operation:

- Deck Leveling From Left to Right
- Deck Cutting Height
- Center 3-Point Link Adjustment
- Tailwheel Height Adjustment

Proper adjustment of each of these items will provide for higher efficiency, improved cutting performance, and longer blade life. The following tools will be needed:

- Pliable tape measure
- Spirit or carpenters level
- Set of wrenches and/or socket wrench set
- Protective gloves

WARNING

Always disengage PTO, put tractor in park or set park brake, shut tractor engine off, remove ignition key, and wait for all moving parts to stop before dismounting from tractor.

Deck Leveling From Left to Right

Refer to Figure 3-2 on page 19:

1. Locate tractor with Rotary Cutter on a flat, level surface.
2. Use tractor's hydraulic 3-Point control lever to lower cutter until tailwheel makes contact with ground surface.
3. Place a level on the cutter deck as shown. Manually adjust one or both lower 3-Point lift arms until deck is level from left to right. On some tractors, only one arm can be adjusted vertically.

Deck Cutting Height

Refer to Figure 3-1:

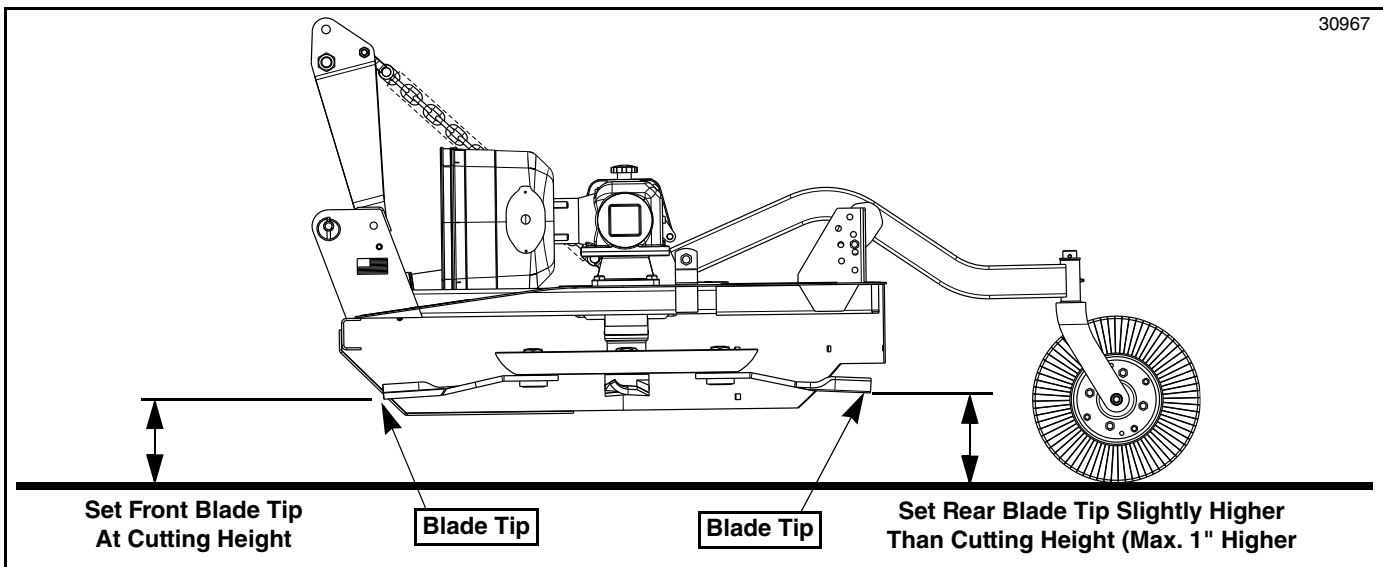


CAUTION

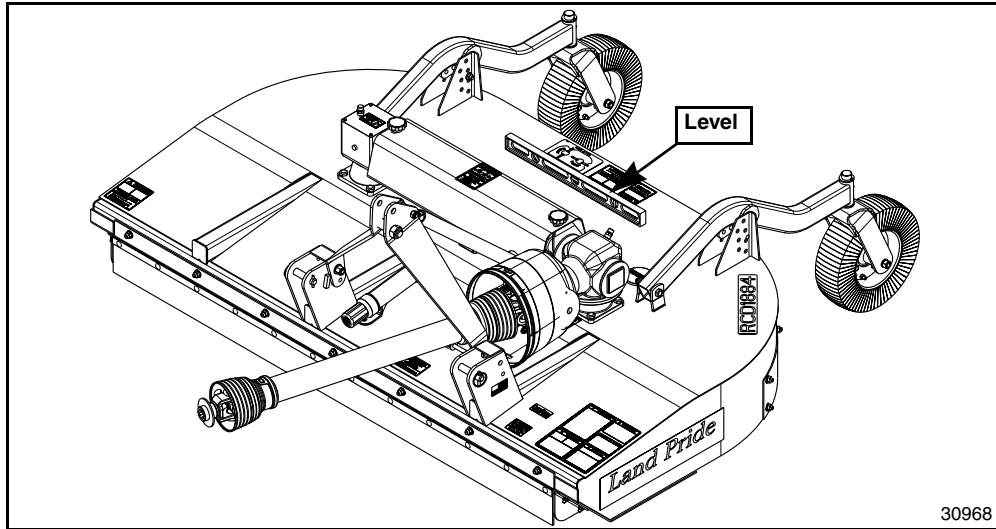
Avoid direct contact with cutter blades by wearing a pair of gloves. Cutter blades have sharp edges and burrs that can cause injuries.

IMPORTANT: The front blade tip should be lower than rear blade tip by approximately 1". The cutter is subject to continuous material flow under the deck if the rear blade is at the same height or lower than the front blade causing horsepower loss, grass clumps, blade wear, and frequent blade sharpening.

1. With gloves on hands, carefully rotate each blade tip to the position shown in Figure 3-1.
2. Measure distance from cutting tip of front blade to ground surface. This distance is the cutting height.
3. Using tractor's 3-Point hydraulic control, raise or lower the 3-Point arms until the front blade tip is at the desired cutting height.
4. The top center link should be loose when deck rear is supported by the tailwheel. If not, lengthen center link until loose. Final adjustment will be made later.
5. Measure distance from cutting tip of rear blade to ground. This distance should be slightly higher than the front blade but not more than 1" higher.
6. If rear blade is lower than the front blade or is more than 1" higher than the front blade, then the tailwheel height must be adjusted. If needed, see **"Tailwheel Height Adjustment"** instructions below.
7. Repeat steps 1 through 6 until tailwheel and 3-Point arms are adjusted to the desired cutting height.
8. Set tractor's 3-Point hydraulic control stop once the tailwheel and 3-Point arms are adjusted properly.



Cutting Height
Figure 3-1



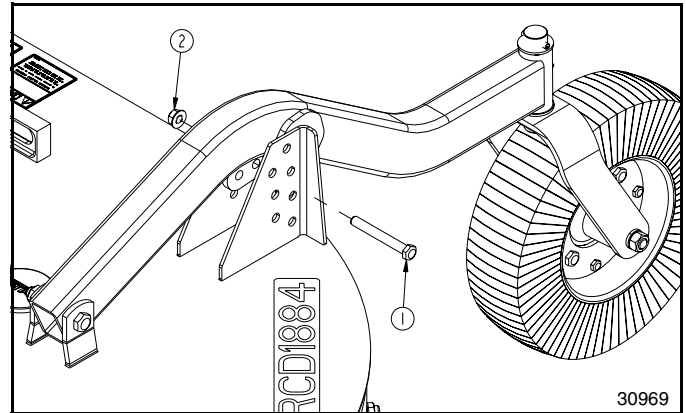
Deck Leveling
Figure 3-2

Tailwheel Height Adjustment

Refer to Figure 3-3:

If the front blade tip is set at the desired cutting height and the back blade tip is at the same height or lower or is higher than the front blade tip by more than 1", then tailwheel (#1) must be adjusted up or down as follows:

1. Use tractor's 3-Point hydraulic control to lift cutter until tailwheels clear the ground.
2. Remove hex whiz nut (#2) and cap screw (#1).
3. Adjust tailwheel as follows:
 - To lower rear blade height, raise tailwheel up.
 - To increase rear blade height, lower tailwheel down.
4. With tailwheels adjusted to the correct height, replace 1/2"-13 x 4" GR5 cap screw (#1) and hex whiz nut (#2). Tighten whiz nut to the correct torque.
5. Readjust tractor's lower 3-Point lift arms as needed. See **"Deck Cutting Height"** on page 18.



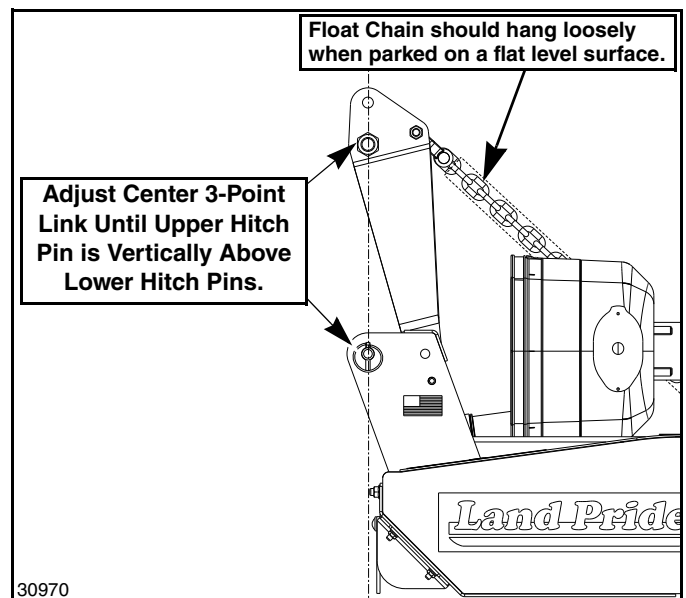
Tailwheel Height Adjustment
Figure 3-3

Center 3-Point Link Adjustment

Refer to Figure 3-4:

NOTE: The lower bolted-on-bushing in the center hitch is used with a quick hitch attachment.

1. Lower cutter deck to preset cutting height.
2. Adjust length of center 3-Point link until the center hitch pin is vertically above the lower 3-Point hitch pins. The float chain should be hanging loosely when adjusted correctly. This arrangement allows for optimum ground contour following performance.
3. Lock center 3-Point link in this position.



Center 3-Point Link Adjustment
Figure 3-4

Section 4: Operating Instructions

Operating Checklist

Hazard control and accident prevention are dependent upon the awareness, concern, prudence, and proper training involved in the operation, transport, storage, and maintenance of the Rotary Cutter. Therefore, it is absolutely essential that no one operates the Rotary Cutter without first having read, fully understood, and become totally familiar with the Operator's Manual. Make sure the operator has paid particular attention to:

- **Important Safety Information**, pages 1 to 7
- **Section 1: Assembly & Set-up**, page 9
- **Section 2: Options & Accessories**, page 14
- **Section 3: Adjustments**, page 18
- **Section 4: Operating Instructions**, page 20
- **Section 5: Maintenance & Lubrication**, page 24

The following inspection should be performed before using the cutter.

Operating Checklist

✓	Check	Page
	Make sure all guards and shields are in place. Refer to "Important Safety Information".	Page 1
	Follow hook-up & driveline instructions. Refer to "Tractor Hook-Up" & "Driveline Installation".	Page 10 & Page 11
	Make all required adjustments. Refer to "Section 3: Adjustments".	Page 18
	Perform all required maintenance. Refer to "Section 5: Maintenance & Lubrication".	Page 24
	Lubricate cutter and driveline as needed. Refer to "Lubrication".	Page 28
	Lubricate all gearboxes and replace oil plugs properly. Refer to "Gearbox" lubrication.	Page 28
	Check cutter initially and periodically for loose bolts and pins. Refer to "Torque Values Chart".	Page 34

Safety Information

DANGER

Do not engage tractor PTO while hooking-up and unhooking driveline or while someone is standing near the driveline. A person's body and/or clothing can become entangled in the driveline resulting in serious injury or death.

DANGER

Do not operate a broken or bent driveline. Such drivelines can break apart while rotating at high speeds causing serious injury or death. Always remove Rotary Cutter from service until damaged drivelines are repaired or replaced.

DANGER

Do not engage tractor PTO while hooking-up and unhooking driveline or while someone is standing near the driveline. A person's body and/or clothing can become entangled in the driveline resulting in serious injury or death.

DANGER

All guards and shields must be installed and in good working condition at all times during cutter operation.

DANGER

Keep others away while cutter is operating. It can discharge objects at high speeds. Therefore, the use of front and rear safety guards is required when cutting along highways and in areas where people may be present. Stop blade rotation if a bystander is within several hundred feet.

DANGER

Do not operate a broken or bent driveline. Such drivelines can break apart while rotating at high speeds causing serious injury or death. Always remove Rotary Cutter from service until damaged drivelines are repaired or replaced.

DANGER

Tractor PTO shield, gearbox shaft shield, and driveline shields must be secured in place when operating cutter to avoid injury or death from entanglement in driveline.

DANGER

Always disconnect driveline from tractor PTO shaft before servicing underside of cutter. If tractor is started with PTO engaged, the cutter can cause bodily injury or death.

DANGER

Never place hands or feet under the deck or attempt to make adjustments to the cutter with PTO engaged. Cutter blades rotating at high speeds cannot be seen and are located close to the deck housing. Body extremities can be cut off instantly.

DANGER

Do not operate and/or travel across steep inclines where a tractor can rollover resulting in serious injury or death. Consult your tractor's manual for acceptable inclines the tractor is capable of traveling across.

DANGER

Do not use cutter as a fan. Cutting blades are not properly designed or guarded for this use. Using cutter as a fan can result in injury or death.

WARNING

Do not use a PTO adapter. A PTO adapter will increase strain on the tractor's PTO shaft resulting in possible damage to shaft and driveline. It will also defeat the purpose of the tractor's master shield and could cause bodily injury or death.

Section 4: Operating Instructions



WARNING

Never allow riders including children on the tractor or cutter. They can fall and be ran over causing serious injury or death.



WARNING

Do not operate cutter with loose hardware. Loose hardware can result in a breakdown causing bodily injury or death.



WARNING

Always disengage PTO, put tractor in park or set park brake, shut tractor engine off, remove ignition key, and wait for all moving parts to stop before dismounting from tractor.



WARNING

Always disengage PTO before lifting cutter up and never operate cutter in the raised position. The cutter can discharge objects at high speeds resulting in serious injury or death.



WARNING

Always disengage PTO before lifting cutter too high and never engage PTO with cutter raised too high. Doing so can cause rotating u-joints to break into pieces that can be thrown at high speeds causing serious injury or death.



WARNING

Keep blade bolt access hole covered at all times except when servicing cutter blades. Make sure driveline is disconnected from the tractor before servicing cutter blades.



WARNING

Do not use deck as a working platform. The deck is not properly designed or guarded for this use. Using deck as a working platform could cause serious injury or death.



WARNING

Do not use cutter to lift or carry objects, to pull fence posts, stumps or other objects, or to tow other equipment. Doing so can damage the cutter, cause serious bodily injury or death.



CAUTION

Buildup of debris around moving parts and gearboxes is a fire hazard. Keep rotating parts and gearboxes free from debris to avoid serious injury and property damage.



CAUTION

Do not exceed rated cutting capacity of your cutter. See specifications & capacities for specified cutting capacity. Exceeding ratted cutting capacities can damage drive components, cutter blades, and deck components.



CAUTION

Improper oil level can cause bearing failure and be a fire hazard. Maintain proper gearbox oil level to avoid serious injury and property damage.



CAUTION

Do not over speed PTO or machine damage may result. This cutter is designed to operate at 540 RPM rear PTO.

Inspection of Tractor & Cutter

Make the following inspections with cutter attached to a tractor, PTO disengaged, and PTO completely stopped:

1. Park tractor and cutter on a level surface.
2. Disengage PTO, place gear selector in park, set park brake, shut tractor off, and remove switch key. Make sure cutter blades have come to a complete stop before dismounting from tractor.
3. Inspect tractor safety equipment to make sure it is installed and in good working condition.
4. Inspect cutter safety equipment to make sure it is installed and in good working condition.
5. Check driveline to make certain it is securely connected to the tractor PTO shaft and cutter gearbox shaft.
6. Check driveline guards to make certain they are in good condition and in place.
7. Carefully raise and lower implement to ensure that the drawbar, tires, and other equipment on the tractor do not contact cutter frame or driveline.
8. With cutter deck resting on solid supports, PTO disengaged, and blade rotation completely stopped:
 - Check for and remove foreign objects wrapped around blade spindles.
 - Check for nicked, bent, broken, and worn cutting blades. Replace or sharpen blades as required. Refer to “**Cutter Blade Maintenance**” on page 24.
9. Remove solid supports from under the deck.
10. Verify cutter is set at the correct cutting height. See “**Deck Leveling & Cutting Height**” on page 18.

The remaining inspections are made by engaging the PTO to check for vibrations.



WARNING

Stop PTO immediately if vibration continues after a few revolutions during start-up and anytime thereafter. Wait for PTO to come to a complete stop before dismounting from tractor to check for probable causes. Make necessary repairs and adjustments before continuing.

IMPORTANT: Do not exceed rated cutter PTO speed. Excessive engine speed will cause damage to power train components.

Section 4: Operating Instructions

11. Start tractor, set throttle to idle or slightly above idle, and slowly engage PTO. Initial start-up vibration is normal and should stop after a few revolutions. Stop PTO rotation immediately if vibration continues.
12. Once cutter is running smoothly, increase tractor PTO speed to 540 RPM. Stop PTO rotation immediately if vibration occurs.
13. Investigate cause of vibration and make repairs before putting cutter back into service.

Transporting



WARNING
When traveling on public roads, use accessory lights, SMV sign, clean reflectors, and other adequate devices to warn operators in other vehicles of your presence. Always comply with all federal, state, and local laws.

IMPORTANT: Always disengage tractor PTO before raising cutter to transport position.

1. Make sure driveline does not contact tractor or cutter when raising cutter to transport position.
2. Reduce tractor ground speed when turning and leave enough clearance so cutter does not contact obstacles such as buildings, trees, or fences.
3. Limit transport speed to 20 mph. Transport only with a farm tractor of sufficient size and horse power.
4. When traveling on roadways, transport in such a way that faster moving vehicles may pass you safely.
5. Shift tractor to a lower gear when traveling over rough or hilly terrain.

Blade Engagement & Disengagement

Cutter blades can lock-up against each other during start-up and shut-down especially if the tractor's PTO engagement is "**INSTANT ON**" and "**INSTANT OFF**". Following Blade Engagement and Blade Disengagement instructions below will help eliminate blade lock up.

Blade Engagement

1. Increase throttle to a speed just enough to get the cutter started without stalling tractor while slowly engaging PTO drivelines. Use tractor's PTO soft start option if available.
2. Ensure that all power shafts are rotating and that the cutter is not vibrating excessively after ramping up to PTO speed for at least 3 seconds. If excessive vibration continues after 3 seconds at full PTO speed, disengage PTO immediately, shut down tractor, and remove switch key.
3. Check blades for a lock-up situation. Block cutter deck up before working under the unit. Unlock blades, remove support blocks, and repeat "**Blade Engagement**" instructions.

Blade Disengagement

1. Slowly decrease throttle speed until engine idle speed is reached and then disengage PTO.
2. Engage tractor park brake, shut tractor engine off and remove switch key. Stay on tractor until blades have come to a complete stop.

Field Operation



WARNING

Clear area to be cut of debris and other unforeseen removable objects before cutting. Mark any potential hazards that cannot be removed such as tree stumps, post, rocks, holes, and drop-offs with a visible flag.

IMPORTANT: Maintain correct PTO speed. Loss of PTO speed will allow blades to swing back resulting in ragged, uneven cutting. Excessive engine speed will cause damage to the power train components.

IMPORTANT: Your cutter is equipped with free swinging cutting blades to reduce shock loads when striking obstacles. However, it is best to avoid striking obstacles to extend cutter and blade life.

NOTE: Do not cut in wet conditions. Wet material will build up on the deck underside creating poor discharge, high wear, and additional horsepower.

Periodically disengage PTO, turn off tractor, remove key & check for objects wrapped around blade spindle. Block deck up before removing objects.

Frequently inspect cutter for loose bolts and nuts. Tighten all loose hardware as indicated in the "**Torque Values Chart**" on page 34.

1. Thoroughly inspect area to be cut for debris and unforeseen objects. Mark any potential hazards.
2. Follow "**Blade Engagement**" instructions on right side of this page to start cutter blades turning.
3. Optimum ground speed depends on density of material being cut, horsepower rating of tractor, and terrain. Always operate tractor at cutter's full rated PTO speed in a gear range that allows cutter to make a smooth cut without lugging tractor down, usually between 2 to 5 mph.
4. Follow "**Blade Disengagement**" instructions on right side of this page to stop cutter blades. After the first 50 feet, disengage PTO and check to see that the cutter is adjusted properly.
5. Do not engage PTO when cutter is in the fully raised or lowered positions.
6. Periodically disengage PTO, shut down tractor, remove key, and check for foreign objects wrapped around the blade spindle. Block cutter deck up before removing objects.

Section 4: Operating Instructions

7. Frequently inspect cutter for loose bolts and nuts. Tighten all loose bolts and nuts as indicated in the “**Torque Values Chart for Common Bolt Sizes**” on page 34.
8. For additional information, see “**General Operating Instructions**” on page 23.

Unhook Rotary Cutter

1. Unhook Rotary Cutter from the tractor as follows:
2. See “**Long Term Storage**” on page 27 if cutter is to be stored for a long time.
3. Park on a level solid surface and lower deck to ground level or onto support blocks.
4. Engage tractor park brake, shut tractor engine off, and remove switch key. Stay on tractor until blades have come to a complete stop.
5. Disconnect driveline from tractor.
6. Unhook 3-Point hitch from tractor and drive tractor forward several feet.
7. Reinstall hitch pins, linch pins, and hair pin cotters in cutter hitch for safe keeping.
8. Collapse driveline by pushing tractor end of driveline towards cutter gearbox.
9. Support driveline off the ground with a support block to keep it up out of the dirt.

General Operating Instructions

It is important that you familiarize yourself with the Operator's Manual, completed Operators Checklist, properly attached cutter to your tractor, made leveling adjustments, and preset your cutting height before beginning a running operational safety check on your Land Pride Rotary Cutter.

The running operational safety check may now be done. It is important that at any time during this safety check you detect a malfunction in either the cutter or tractor that you immediately shut the tractor off, remove its key, and make necessary repairs and/or adjustments before continuing on.

Make sure before starting the tractor that the park brake is engaged, PTO is disengaged, and cutter is resting on the ground. Start tractor and set engine throttle speed at a low idle. Raise cutter with tractor's rear hydraulic lift control lever to transport position making sure that the driveline does not bind and does not contact the cutter frame. Lower the cutter to the ground and at a low engine speed engage the PTO. If everything is running smoothly at a low idle, slowly raise the cutter to transport height checking for bind or chatter in the driveline. Lower the cutter to the ground and increase the tractor's engine rpm until it reaches the cutter full PTO operating speed of 540 rpm. If everything is still running smoothly, once more raise the cutter to transport height to check for driveline bind or chatter. Lower the cutter to the ground, return the engine to a low idle, and disengage the PTO. Position the adjustable stops on the tractor's hydraulic lift lever so the

cutter can be consistently returned to the same cutting and transport height.

You should now be ready to transport to your cutting site at a safe ground speed. On roadways transport in such a manner that faster moving vehicles can easily see you and pass you safely. Reduce your speed when traveling over rough and hilly terrain. Avoid quick or sharp steering corrections. Take extra care to ensure that the mower doesn't come into contact with obstacles such as trees, buildings, or fences. Use accessory lights and appropriate reflective devices to provide adequate warning to pedestrians and other vehicle operators when traveling on public roads and in the dark of night. Comply with all local, state, and federal laws.

It is important that you inspect the area where you will be cutting and clear it of safety hazards and foreign objects either before or after you arrive at the cutting site. Never assume the area is clear. Cut only in areas you are familiar with and are free of debris and unseen objects. Extremely tall grass should be cut twice to detect potential hazards. In the event you do strike an object stop the cutter and tractor immediately to inspect and make necessary repairs to the cutter before resuming operation. It really pays to inspect a new area and to develop a safe plan before cutting.

You will need to maintain 540 rpm PTO speed and 2 to 5 mph ground speed to produce a clean cut. Make a tractor gear and range selection that will enable you to maintain these speed combinations. Generally the quality of cut is better at lower ground speeds. Dense ground cover will create the need to slow down even more. In certain conditions tractor tires will roll grass down resulting in an uneven cut when the grass fails to rebound. Should this happen you may try reversing the direction of cut and/or double cut to achieve the desired finish. Avoid very low cutting heights especially on extremely uneven terrain. Always cut downward on slopes and avoid crossing the face of steep slopes. Avoid sharp drops and cross diagonally through dips to prevent hanging up tractor and cutter. Slow down in turns. Remember to look back often.

Now that you're prepared and well briefed you may begin cutting. Reducing tractor engine speed, lower cutter to cutting position, engage PTO, raise engine RPM to the appropriate PTO speed and begin cutting.

Make wide turns when possible. Three-point hitch and optional Quick Hitch models can be lifted into transport position to make tight turns and to reverse direction. Try increasing or decreasing ground speed to determine the effect on quality of cut. With a little practice you will be pleased with what you and your Land Pride Rotary Cutter can do.

Whether you are done mowing, need to take a break, or just need to make a few adjustments to the cutter, remember to reduce tractor RPM, disengage PTO, stop on level ground, set tractor park brake, turn off engine, and remove switch key. Stay on the tractor until the cutter blades have come to a complete dead stop.

Section 5: Maintenance & Lubrication

Maintenance

Proper servicing and adjustments are key to the long life of any implement. With careful inspection and routine maintenance, you can avoid costly downtime and repair.

Check all bolts and pins after using the unit for several hours and on a regular basis thereafter to ensure they are tight and secured.

Replace worn, damaged, or illegible safety labels by obtaining new labels from your Land Pride Dealer.



CAUTION

Do not alter Land Pride equipment or replace parts with other brands. Doing so can cause equipment to perform improperly and may lead to breakage that can cause bodily injury. Replace parts only with genuine Land Pride parts.



CAUTION

Buildup of debris around moving parts and gearboxes is a fire hazard. Keep rotating parts and gearboxes free from debris to avoid serious injury and property damage.



CAUTION

Improper oil level can cause bearing failure and be a fire hazard. Maintain proper gearbox oil level to avoid serious injury and property damage.

Cutter Blade Maintenance



DANGER

Always disconnect driveline from tractor PTO shaft before servicing underside of cutter. If tractor is started with PTO engaged, the cutter can cause bodily injury or death.



DANGER

Always secure cutter deck in the up position with solid supports before servicing underside of cutter. Never work under equipment supported by hydraulics. Hydraulics can drop equipment if controls are actuated or if hydraulic lines burst. Either situation can drop the cutter instantly even when power to the hydraulics is shut off.



WARNING

Keep blade bolt access hole covered at all times except when servicing cutter blades. Make sure driveline is disconnected from the tractor before servicing cutter blades.



WARNING

Do not operate cutter with blades that are out-of-balance, bent, excessively worn, excessively nicked, or with blade bolts that are excessively worn. Such blades can break loose from the cutter at high speeds causing serious injury or death.



WARNING

Do not attempt to straighten a bent blade or weld on a blade. Do not attempt to modify a blade such as hard surfacing, heat treating, cold treating, or by any other method. Always replace blades with a new Land Pride blade to assure safety.

IMPORTANT: Replace cutting blades in pairs with genuine Land Pride blades only. Replacing single blades can result in an out-of-balance condition that will contribute to premature bearing wear/breakage and/or structural cracks in gearbox and/or deck.

Always inspect cutting blades before each use. Make certain they are properly installed and are in good working condition. Replace any blade that is damaged, worn, bent, or excessively nicked. Small nicks can be ground out when sharpening. Remove cutting blades and sharpen or replace:

1. Place tractor gear selector in park and set brakes, shut engine off and remove ignition key.
2. Disconnect main driveline from tractor PTO and secure cutter deck in the up position with solid supports before servicing underside of cutter.

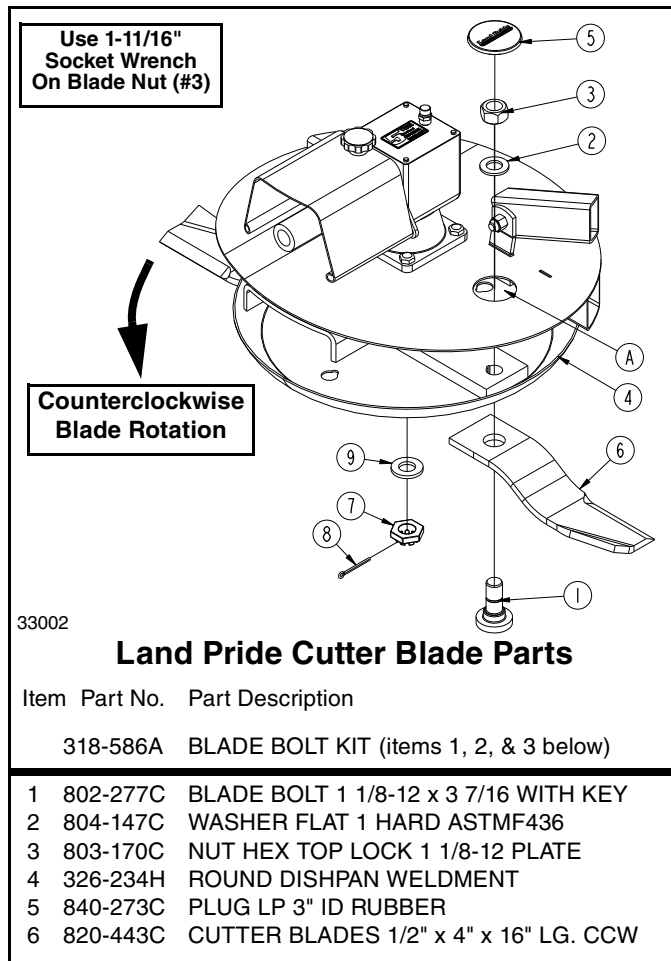
Refer to Figure 5-1 on page 25:

3. Remove access cover (#5).
4. Rotate blade bolt (#1) until aligned with access hole (A).
5. Unscrew locknut (#3) to remove cutting blade (#6). Blade bolt (#1) is keyed and will not turn freely.
6. Both blades should be sharpened at the same angle as the original cutting edge and must be replaced or re-ground at the same time to maintain proper balance in the cutting unit. The following precautions should be taken when sharpening blades:
 - a. Do not remove more material than necessary.
 - b. Do not heat and pound out a cutting edge.
 - c. Do not grind blades to a razor edge. Leave a blunt cutting edge approximately 1/16" thick.
 - d. Always grind cutting edge so end of blade remains square to cutting edge and not rounded.
 - e. Do not sharpen back side of blade.
 - f. Both blades should weigh the same with not more than 1 1/2 oz. difference. Unbalanced blades will cause excessive vibration which can damage gearbox bearings and create structural cracks.
7. Carefully check cutting edges of blades in relation to blade rotation to ensure correct blade placement. Blade rotation is counterclockwise with cutting edge leading. See Figure 5-2 on page 25. Airfoil (lift) must be oriented towards the top of the deck.

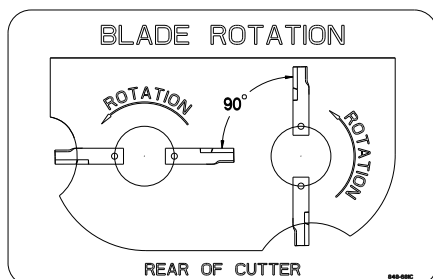
IMPORTANT: Locknuts can lose their ability to lock properly once removed. Always use a new locknut when installing blades.

IMPORTANT: Examine blade bolts (#1) and flat washers (#2) for excessive wear and replace if worn.

8. Insert blade bolt (#1) through blade (#6), dish pan (#4), and flat washer (#2). Secure blade with a **new locknut (#3)** and torque to 450 ft-lbs.
9. Replace access cover (#5).
10. If replacing dishpan (#4), castle nut (#7) on gearbox output shaft should be torqued to 450 ft-lbs. minimum and secured with cotter pin (#8) with both legs bent opposite directions around the nut.



**Cutter Blade Assembly
Figure 5-1**



**Blade Rotation & Timing
Figure 5-2**

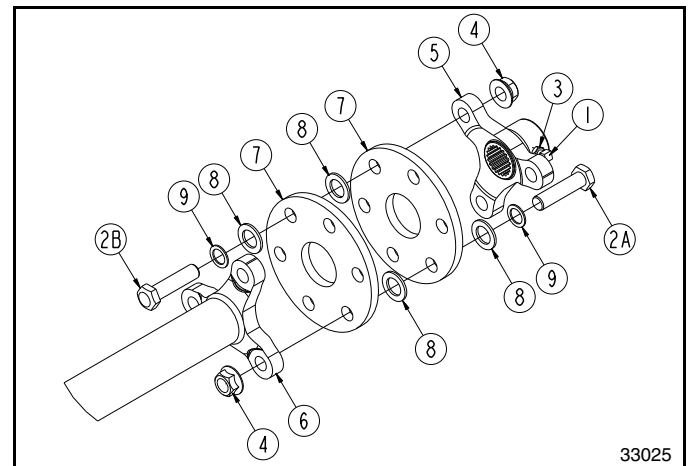
Flex Coupler & Blade Timing

Refer to Figure 5-3:

If rubber discs (#7) are wrinkled, the blades may be out of time and hit each other. Replace rubber disc if blades hit. Follow instructions below when replacing rubber discs and when adjusting blade timing.

IMPORTANT: See Figure 5-2. Cutter blades must be 90 deg. to each other to be in time or blades will contact each other when hitting solid objects such as tree stumps, rocks and earth. Blades hitting each other will become bent, broken, or twisted and require being replaced immediately.

IMPORTANT: Through use, rubber discs (#7) will become wrinkled from hitting solid objects causing blades to be out of time. Replace rubber disc when wrinkling causes blades to make a ticking sound from touching each other while cutting heavy brush.



**Flex Coupler Assembly
Figure 5-3**

1. Unbolt/remove rubber discs (#7) from flex coupler. Keep rubber discs that are in good shape and replace them if they are wrinkled excessively.
2. Loosen jam nut (#3) and set screw (#1). Slide spider (#5) off main gear box output shaft.
3. Rotate cutter blades until blades on the left dishpan are 90° to blades on the right dishpan.
4. Hold blades 90° apart. Center spider lugs (#5) between spider tube lugs (#6) and push spider (#5) onto main gearbox output shaft.
5. Attach rubber discs (#7) to spider tube lugs (#6) with existing bolts (#2A), washers (#9), bushing (#8), and hex flange locknuts (#4) as shown. Do not tighten.
6. Attach rubber discs (#7) to spider lugs (#5) with existing bolts (#2B), washers (#9), bushing (#8), and hex flange locknuts (#4) as shown. Do not tighten.
7. Tighten nuts (#4) evenly until rubber disc (#7) touch each other at each bolt location. Bushings (#8) should be compressed halfway into the rubber discs.

Driveline Protection

The drive-train is protected from shock loads with a four plate slip-clutch. The slip-clutch must be capable of slippage during operation. Always do a "clutch run-in" operation at the beginning of each season and after long periods of inactivity to remove any oxidation that may have accumulated on the friction surfaces. Repeat "clutch run-in" instructions when moisture and/or condensation seizes the inner friction plates.

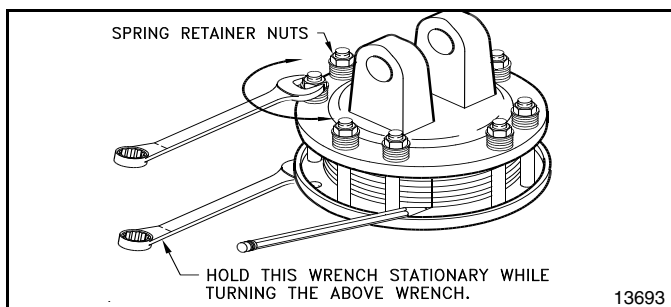
WARNING

Always disengage PTO, engage parking brake, shut off tractor, remove ignition key, and wait for all moving parts to come to a complete stop before dismounting tractor to make adjustments.

Clutch Run-In

Refer to Figure 5-4:

1. Using a pencil or other marker, scribe a line across the exposed edges of the clutch plates and friction discs.



**Clutch
Figure 5-4**

2. Carefully loosen each of the 8 spring retainer nuts by exactly 2 revolutions. It will be necessary to hold hex end of retainer bolt in order to count the exact number of revolutions.
3. Start tractor and engage PTO drive for 2-3 seconds to permit slippage of the clutch surfaces. Disengage PTO, then re-engage a second time for 2-3 seconds. Disengage PTO, shut off tractor, and remove key. Wait for all components to stop before dismounting from tractor.
4. Inspect clutch and ensure that the scribed markings made on the clutch plates have changed position. Slippage has not occurred if any two marks on the friction disc and plate are still aligned. A clutch that has not slipped must be disassembled to separate the friction disc plates. See "**Clutch Assembly and Disassembly**" on page 26.
5. Tighten each of the 8 spring retainer nuts on the clutch housing exactly 2 revolutions to restore the clutch to the original setting pressure.
6. The clutch should be checked during the first hour of cutting and periodically each week. An additional set of scribe marks can be added to check for slippage. See Figure 5-6 to adjust spring length.

Clutch Assembly and Disassembly

Disassembly

Refer to Figure 5-5:

IMPORTANT: Refer to Figure 5-6. Be Sure to measure and record length ("A") of each clutch spring before disassembling clutch.

See **IMPORTANT NOTE** above before disassembling clutch. After measuring and recording each spring length, remove spring retainer nuts (#1), springs (#2), and bolts (#3). Each friction disc (#4) must then be separated from the metal surface adjacent to it. Refer to the Parts Manual for a detailed parts breakdown.

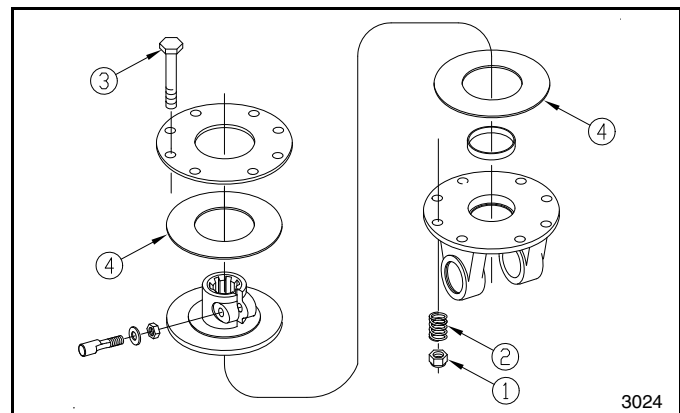
Inspection

Inspect all parts for excessive wear and condition. Clean all parts that do not require replacement. The original friction disc thickness is 1/8" (3.2mm) and should be replaced if thickness falls below 3/64" (1.1mm). If clutches have been slipped to the point of "smoking," the friction discs may be damaged and should be replaced. Heat build-up may also affect the yoke joints.

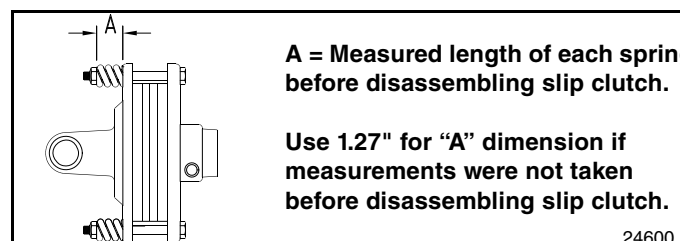
Assembly

Refer to Figure 5-5 & Figure 5-6:

Reassemble each friction disc (#4) next to the metal plate it was separated from. Install bolts (#3) through the end plates and intermediate plates as shown. Place springs (#2) over bolts (#3) and secure with nuts (#1). Progressively tighten each spring retainer bolt until correct spring height "A" dimension is obtained.



**Clutch Disassembly
Figure 5-5**



**Clutch Adjustment
Figure 5-6**

Skid Shoe Maintenance (Accessory)

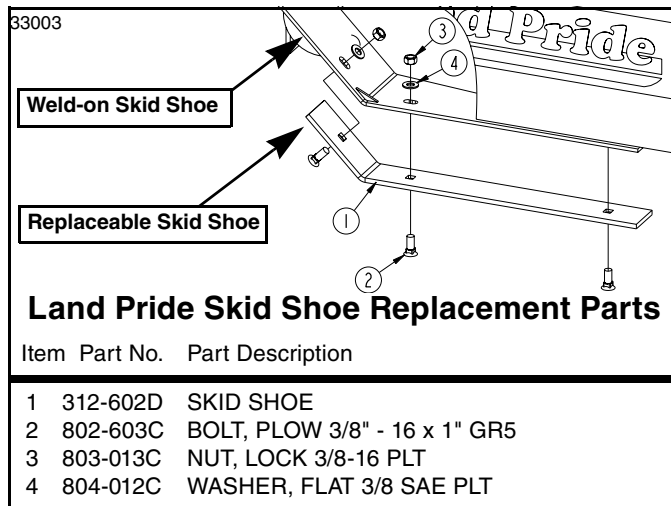
Refer to Figure 5-7:

WARNING

Excessive wear on skid shoes can damage side panels, cause inadequate operation of cutter, and create a safety hazard. Always replace skid shoes at the first sign of wearing thin.

If the accessory skid shoes are mounted on the cutter side skirts, check them for wear and replace as needed. Order only genuine Land Pride parts from your local Land Pride dealer.

1. Remove 3/8" hex whiz nuts (#3), flat washers (#4), 3/8" plow bolts (#2), and skid shoes (#1) as shown.
2. Check plow bolts for wear and replaced if necessary.
3. Attach new skid shoes (#1) to cutter with existing 3/8" plow bolts (#2), flat washers (#4), and 3/8" hex whiz nuts (#3). Tighten nuts to the correct torque.



Skid Shoe Accessory
Figure 5-7

Long Term Storage

Clean, inspect, service, and make necessary repairs to the cutter when parking it for long periods and when parking it at the end of a working season. This will help ensure the cutter is ready for field use the next time you hook-up to it.

CAUTION

Always store cutter with 3-point hitch pivoted back as far as possible. The floating 3-point hitch when not hooked to a tractor can fall backwards unexpectedly causing bodily injury.

DANGER

Always disconnect driveline from tractor PTO shaft before servicing drive train components and cutter blades. The PTO can be engaged if tractor is started causing bodily injury or death.

DANGER

Always secure cutter deck in the up position with solid supports before servicing underside of cutter. Never work under equipment supported by hydraulics. Hydraulics can drop equipment if controls are actuated or if hydraulic lines burst. Either situation can drop the cutter instantly even when power to the hydraulics is shut off.

1. Clean off any dirt and grease that may have accumulated on the cutter and moving parts. Scrape off compacted dirt from the bottom of deck and then wash surface thoroughly with a garden hose. A coating of oil may also be applied to the lower deck area to minimize oxidation.
2. Check blades and blade mounting hardware for wear. Replace blades and hardware as needed. See **"Cutter Blade Maintenance"** on page 24.
3. Inspect for loose, damaged, or worn parts and adjust or replace as needed.
4. Repaint parts where paint is worn or scratched to prevent rust. Ask your dealer for Land Pride aerosol touch-up paint. They are also available in touch-up bottles with brush, quarts, and gallon sizes by adding TU, QT, or GL to the end of the aerosol part number.

Land Pride Aerosol Touch-up Paint

Part No.	Part Description
821-011C	PAINT LP BEIGE AEROSOL SPRAY CAN
821-002C	PAINT LP BLACK AEROSOL SPRAY CAN
821-054C	PAINT MEDIUM RED AEROSOL SPRAY CAN
821-058C	PAINT GREEN AEROSOL SPRAY CAN
821-066C	PAINT ORANGE AEROSOL SPRAY CAN

5. Replace all damaged or missing decals.
6. Lubricate unit. See **"Lubrication"** on page 28.
7. Store cutter on a level surface in a clean, dry place. Inside storage will reduce maintenance and make for a longer cutter life.
8. Follow all unhooking instructions on page 23 when disconnecting tractor from cutter.

Ordering Replacement Parts

Land Pride offers equipment in factory standard beige with black highlights. Equipment may also be purchased in Green, Red or Orange. Special attention must be given to the part number to prevent ordering the wrong color. A suffix number corresponding to one of the colors below must be added at the end of the part number. Parts ordered without the suffix number will be supplied in factory standard colors.

81 Green	83 Red
82 Orange	85 Black

For example, if you are ordering a replacement part with part number 555-555C and the existing part is red, then add the suffix 83 to the end of the number to make the part number read 555-555C83.

Lubrication

Lubrication Legend



Multi-purpose
spray lube



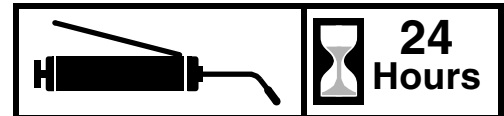
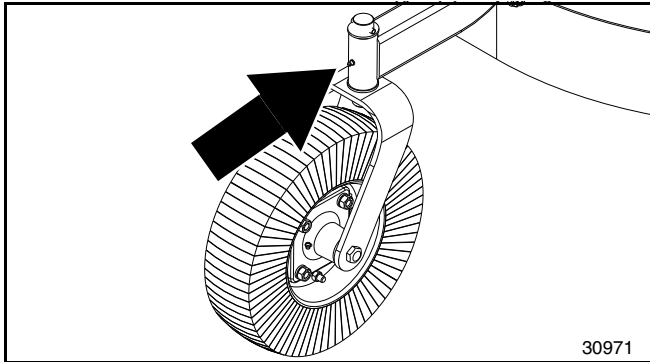
Multi-purpose
grease lube



Multi-purpose
oil lube



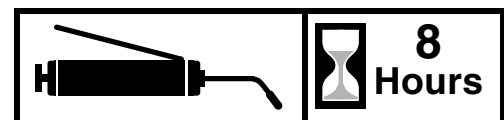
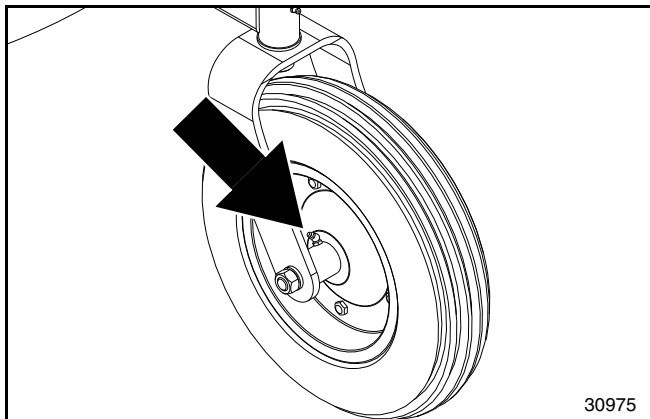
Intervals in hours at which
lubrication is required



Gauge Wheel Spindle Tube

Type of Lubrication: Grease

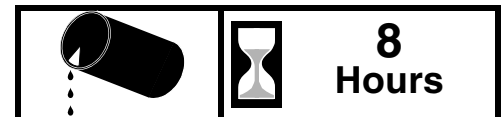
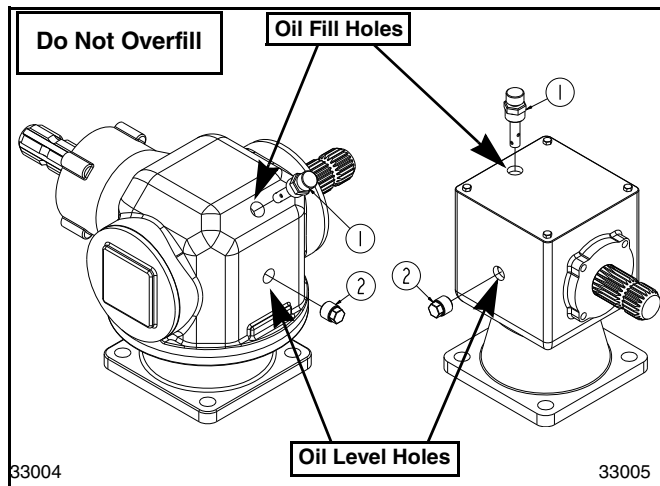
Quantity = 6 pumps



Gauge Wheel Hub

Type of Lubrication: Multi-purpose Grease

Quantity = 2 pumps



Gearbox

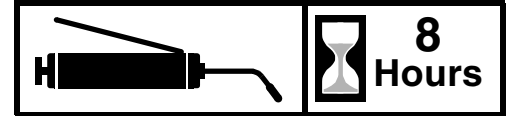
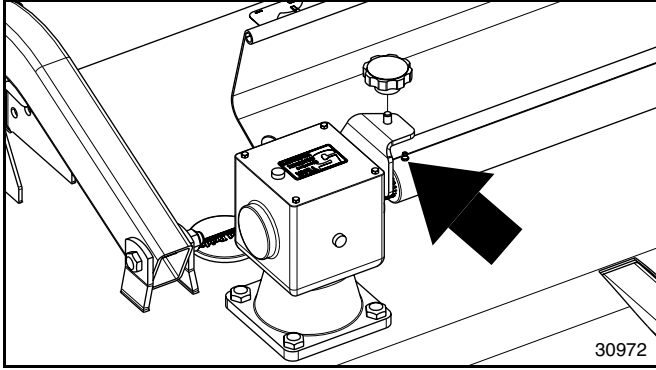
NOTE: Do not overfill! Cutter should be level when checking oil. Oil expands when hot, therefore, always check oil level when cold.

1. Remove side oil level plug (#2) to check oil level. Oil should be level with bottom of oil level hole.
2. If oil is below bottom of oil level hole, remove vented breather plug (#1) and add recommended gear lube through oil fill hole until oil flows out of oil level hole.
3. Reinstall and tighten oil level plug (#2) and vented breather plug (#1).
4. Repeat steps 1 to 3 above for the other gearbox.

Type of Lubrication: 80-90W EP Gear Lube

Quantity = Fill with oil until oil is level with bottom of oil level hole. (Oil should just start to flow out the oil level hole.)

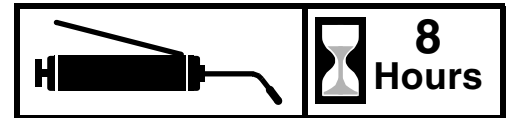
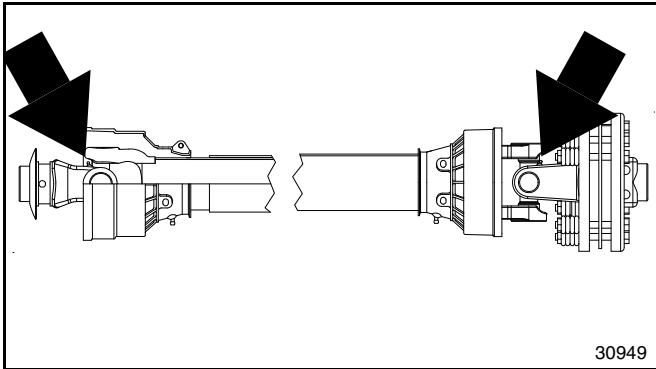
NOTE: Use a suction or siphon pump to drain gearboxes of oil when there is not an oil drain plug.



Flex Coupling Shaft

Type of Lubrication: Multi-purpose Grease

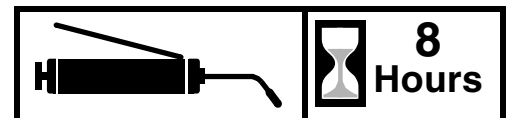
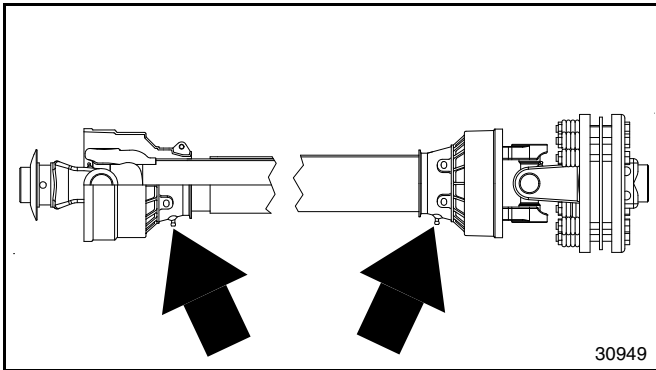
Quantity = 6 pumps



Driveline U-Joints

Type of Lubrication: Multi-purpose Grease

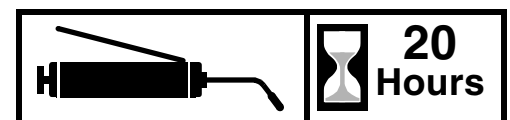
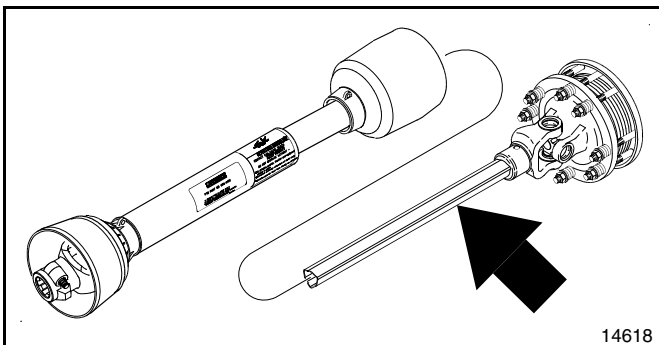
Quantity = 6 pumps



Driveline Shield Bearings

Type of Lubrication: Multi-purpose Grease

Quantity = 6 pumps



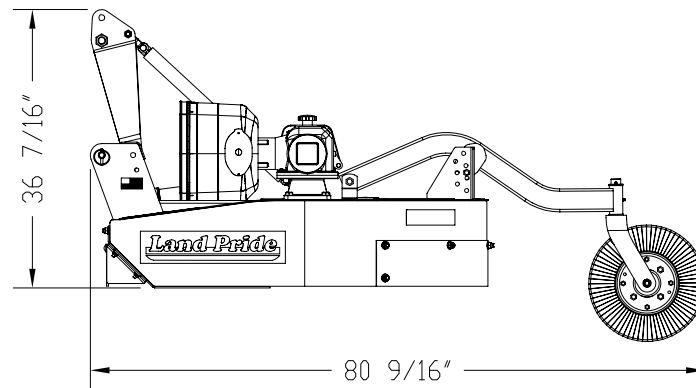
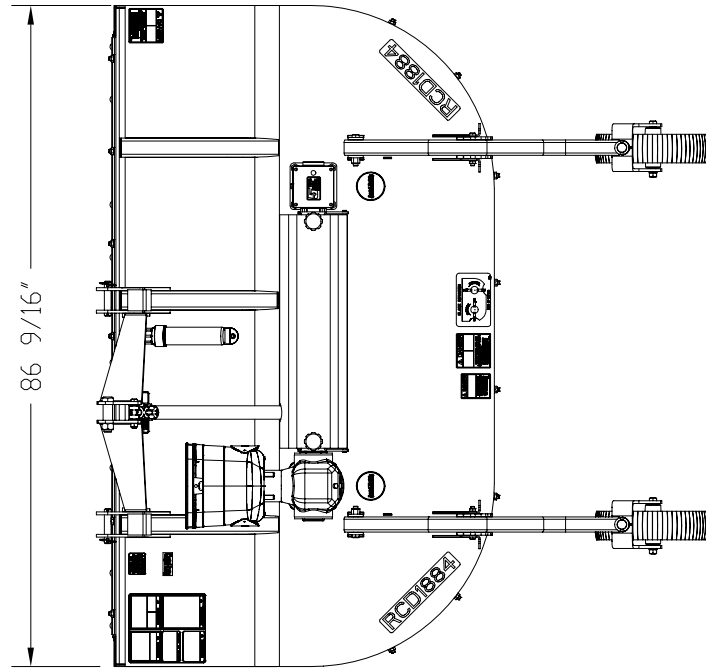
Driveline Profiles

Type of Lubrication: Multi-purpose Grease

Quantity = Clean & coat inner tube of driveline with a light film of grease and then reassemble.

RCD1884 Model

Specifications & Capacities	
Machine Weight with Dual Laminated Tailwheels Dual Solid Tailwheels	900 lbs. 905 lbs.
Hitch	Category I with clevis type lower links and floating top linkage Quick Hitch adaptable
Cutting Width	84"
Overall Width	86 9/16"
Overall Length	80 9/16"
Offset Distance to the Right	10"
Deck Height at Rear	11 5/8"
Cutting Height	2" - 12"
Cutting Capacity	1 1/2" Diameter
Recommended Tractor PTO HP	35-60 HP
PTO Speed	540 rpm
Gearbox	60 Hp main gearbox & 45 HP side gearbox With speed-up beveled gears, cast iron housing, and 1.67" output shaft
Gearbox Lubricant	EP 80-90W oil
Gearbox oil Capacity Main Gearbox Side Gearbox	4.7 pints 3.5 pints
Deck Construction	All welded deck
Deck Material Thickness	10 Gauge
Side Skirt Material Thickness	10 Gauge
Skid Shoe Construction	3/16" Weld-on with mounting holes for adding optional bolt-on replaceable shoes
Stump Jumper	10 Gauge x 24" Round dish pan with 1" x 4" x 19 1/2" blade bar
Blades (4)	1/2" x 4" x 16" Heat treated alloy steel free-swinging suction blades
Blade Overlap	5"
Blade Bolts	Keyed with harden flat washers & lock nuts.
Blade Tip Speed	11,693 fpm
Main Driveline	ASAE Category 3
Main Driveline Protection	2 plate slip clutch
Tailwheel Mount	Caster fork with 360 degree swivel
Tailwheel	Optional two 15" laminated tire or two 4" x 16" molded rubber tire.
Front Guard	Optional 4" x 6" molded rubber or single chain guard
Rear Guard	Standard metal band or optional metal extended guard









30973

RCD1884 Model

Features	Benefits
Surpassed rugged industry standards	All Land Pride Cutters have been designed and tested and meet rigorous voluntary testing procedures specified by ANSI.
5 Year gearbox warranty	Shows our confidence in the gearbox integrity.
Gearbox Seal Protection	Gearbox bottom seal protection for longer bearing life.
Cat. 3 main driveline with 2-plate slip-clutch	2-Plate slip-clutch protect driveline and gearboxes. slip-clutch is more convenient than shear bolt for continual work.
Shock absorbing flex-coupler between main and side gearboxes	Protects intermediate drive shaft and side gearbox from hard objects in the blade path.
10" Deck offset to the right	Allows the operator to cut closer to bodies of water, drainage ditches, roadways and objects such as fence lines, guard rails, buildings, and trees.
Lower clevis type 3-Point hitch	Allows for ease of hook-up to tractor. Also adds additional strength allowing for an even pull from the tractor's lower arms, vs. pulling on a single pin design.
Smooth deck top	Reduces accumulation of debris and is easier and faster to clean.
Fully welded 10 gauge deck	Fully welded deck adds additional strength to the deck. 10 Gauge decks can withstand more abuse than decks with lighter gauge.
Box tubing deck supports	Makes for a stronger rigid deck.
Round back design	Helps discharge grass better than enclosed or partially enclosed cutters.
11 5/8" Deck Height	Allows cutter to handle heavy cutting conditions.
1 1/2" to 12" Cutting height	Provides for a wide range of cutting conditions.
Skid shoes	Provides sidewall reinforcement and protection to bottom of sidewall.
1/2" x 4" Heat-treated free swinging blades	Free swinging protects from obstructions. Heat-treated offers longer life.
1/2" x 4" Blade bar	Heavy-duty blade bar adds support to stump jumper and gearbox output shaft.
Splined blade bar hub	Allows for tight positive fit of stump jumper and blade bar to gearbox output shaft.
Stump jumper	Standard round stump jumper slides over stumps, rocks, and debris.
Front and rear guarding	Protect against flying debris. Optional front rubber or single chain guarding. Standard rear metal band or optional rear extended metal guarding.
Optional 15" Laminated tailwheel 4" x 16' Molded rubber	Laminated material is long lasting in rough conditions and can't go flat. Can't go flat.

Troubleshooting Chart

Problem	Cause	Solution
Oil seal leaking	Gearbox overfilled	Drain to side plug hole
	Seals damaged	Replace seals
	Grass or wire wrapped on shaft in seal area	Check seal areas daily
Driveline yoke or cross failing	Shock load	Avoid hitting solid objects
	Needs lubrication	Lubricate every 8 hours
Driveline clutch is slipping	Scalping the ground	Raise cutting height
	Cutting too fast	Reduce travel speed
	PTO being engaged too fast at high engine rpm	Slowly engage PTO at low engine rpm
	Cutting over solid objects	Avoid solid objects
Bent Driveline (NOTE: driveline should be repaired or replaced if bent)	Contacting frame	Reduce lift height in transport position
	Contacting drawbar	Reposition drawbar
	Bottoming out	Shorten driveline
	Binding up	Not lubricating enough
Driveline telescoping tube failing	Shock load	Avoid hitting solid objects
Driveline telescoping tube wearing	Needs lubrication	Lubricate every 20 hours
Blades Lock-up	Tractor has instant on PTO	Engage PTO at low RPMs and then slowly increase engine speed to full PTO speed. See Blade Engagement on page 22.
	Tractor has Instant off PTO	Decrease engine speed slowly to an idle and then disengage PTO. See Blade Disengagement on page 22.
Blades wearing excessively	Cutting on sandy ground	Raise cutting height
	Contacting ground frequently	Raise cutting height
Blades breaking	Hitting solid objects	Avoid hitting solid objects
Blades coming loose	Blades not tightened properly	Tighten blade hardware (refer to "Cutter Blade Maintenance" on page 24)
	Improper deck attitude	Lower front of deck, see page 19
Blade carrier becomes loose	Running loose in the past	Replace gearbox output shaft and blade carrier
	Blade carrier hardware not tight enough	Tighten to specified torque
Blade bolt holes worn	Blade hardware running loose	Replace blades and blade bolts if worn
Blade carrier bent	Hitting solid objects	Avoid hitting solid objects and replace blade carrier
Excessive side skid wear	Cutting height not level	Adjust cutter height
	Soil abrasive	Adjust cutter height
	Cutting too low	Adjust cutter height
Tailwheel support failing	Lowering too fast	Adjust rate of drop
	Hitting objects when turning	Reduce speed on turns
Excessive vibration	Driveline bent	Replace driveline
	Blades loose	Tighten blade bolts
	Blade carrier bent	Replace blade carrier
	Blade broken	Replace blade
	Blade will not swing	Remove and inspect blade
	Blades have unequal weight	Replace both blades

Torque Values Chart for Common Bolt Sizes																	
Bolt Size (inches)	Bolt Head Identification						Bolt Size (Metric)	Bolt Head Identification									
		Grade 2			Grade 5				Grade 8			Class 5.8			Class 8.8		
in-tpi ¹	N · m ²	ft-lb ³	N · m	ft-lb	N · m	ft-lb	mm x pitch ⁴	N · m	ft-lb	N · m	ft-lb	N · m	ft-lb	N · m	ft-lb		
1/4" - 20	7.4	5.6	11	8	16	12	M 5 X 0.8	4	3	6	5	9	7				
1/4" - 28	8.5	6	13	10	18	14	M 6 X 1	7	5	11	8	15	11				
5/16" - 18	15	11	24	17	33	25	M 8 X 1.25	17	12	26	19	36	27				
5/16" - 24	17	13	26	19	37	27	M 8 X 1	18	13	28	21	39	29				
3/8" - 16	27	20	42	31	59	44	M10 X 1.5	33	24	52	39	72	53				
3/8" - 24	31	22	47	35	67	49	M10 X 0.75	39	29	61	45	85	62				
7/16" - 14	43	32	67	49	95	70	M12 X 1.75	58	42	91	67	125	93				
7/16" - 20	49	36	75	55	105	78	M12 X 1.5	60	44	95	70	130	97				
1/2" - 13	66	49	105	76	145	105	M12 X 1	90	66	105	77	145	105				
1/2" - 20	75	55	115	85	165	120	M14 X 2	92	68	145	105	200	150				
9/16" - 12	95	70	150	110	210	155	M14 X 1.5	99	73	155	115	1215	160				
9/16" - 18	105	79	165	120	235	170	M16 X 2	145	105	225	165	315	230				
5/8" - 11	130	97	205	150	285	210	M16 X 1.5	155	115	240	180	335	245				
5/8" - 18	150	110	230	170	325	240	M18 X 2.5	195	145	310	230	405	300				
3/4" - 10	235	170	360	265	510	375	M18 X 1.5	220	165	350	260	485	355				
3/4" - 16	260	190	405	295	570	420	M20 X 2.5	280	205	440	325	610	450				
7/8" - 9	225	165	585	430	820	605	M20 X 1.5	310	230	650	480	900	665				
7/8" - 14	250	185	640	475	905	670	M24 X 3	480	355	760	560	1050	780				
1" - 8	340	250	875	645	1230	910	M24 X 2	525	390	830	610	1150	845				
1" - 12	370	275	955	705	1350	995	M30 X 3.5	960	705	1510	1120	2100	1550				
1-1/8" - 7	480	355	1080	795	1750	1290	M30 X 2	1060	785	1680	1240	2320	1710				
1-1/8" - 12	540	395	1210	890	1960	1440	M36 X 3.5	1730	1270	2650	1950	3660	2700				
1-1/4" - 7	680	500	1520	1120	2460	1820	M36 X 2	1880	1380	2960	2190	4100	3220				
1-1/4" - 12	750	555	1680	1240	2730	2010	<div>¹ in-tpi = nominal thread diameter in inches-threads per inch</div> <div>² N · m = newton-meters</div> <div>³ ft-lb= foot pounds</div> <div>⁴ mm x pitch = nominal thread diameter in millimeters x thread pitch</div>										
1-3/8" - 6	890	655	1990	1470	3230	2380											
1-3/8" - 12	1010	745	2270	1670	3680	2710											
1-1/2" - 6	1180	870	2640	1950	4290	3160											
1-1/2" - 12	1330	980	2970	2190	4820	3560											
Torque tolerance + 0%, -15% of torquing values. Unless otherwise specified use torque values listed above.																	
Additional Torque Values																	
1" Quick Hitch Bolt & Top Lock Nut			400 to 450 ft-lbs														
Blade Carrier Hub Nut			450 ft-lbs Minimum														
Blade Bolt Lock Nut			450 ft-lbs														

Warranty

Land Pride warrants to the original purchaser that this Land Pride product will be free from defects in material and workmanship beginning on the date of purchase by the end user according to the following schedule when used as intended and under normal service and conditions for personal use.

Overall Unit and Driveline: One year Parts and Labor

Gearbox: 5 years Parts and Labor

Blades, tires and driveline friction discs: Considered wear items

This Warranty is limited to the repair or replacement of any defective part by Land Pride and the installation by the dealer of any such replacement part, and does not cover common wear items. Land Pride reserves the right to inspect any equipment or parts which are claimed to have been defective in material or workmanship.

This Warranty does not apply to any part or product which in Land Pride's judgment shall have been misused or damaged by accident or lack of normal maintenance or care, or which has been repaired or altered in a way which adversely affects its performance or reliability, or which has been used for a purpose for which the product is not designed. Misuse also specifically includes failure to properly maintain oil levels, grease points, and driveline shafts.

Claims under this Warranty should be made to the dealer which originally sold the product and all warranty adjustments must be made through an authorized Land Pride dealer. Land Pride reserves the right to make changes in materials or design of the product at any time without notice.

This Warranty shall not be interpreted to render Land Pride liable for damages of any kind, direct, consequential, or contingent to property. Furthermore, Land Pride shall not be liable for damages resulting from any cause beyond its reasonable control. This Warranty does not extend to loss of crops, any expense or loss for labor, supplies, rental machinery or for any other reason.

No other warranty of any kind whatsoever, express or implied, is made with respect to this sale; and all implied warranties of merchantability and fitness for a particular purpose which exceed the obligations set forth in this written warranty are hereby disclaimed and excluded from this sale.

This Warranty is not valid unless registered with Land Pride within 30 days from the date of purchase by the end user.

IMPORTANT: The Online Warranty Registration should be completed by the dealer at the time of purchase. This information is necessary to provide you with quality customer service.

Model Number _____

Serial Number _____



Corporate Office: P.O. Box 5060
Salina, Kansas 67402-5060 USA
www.landpride.com
